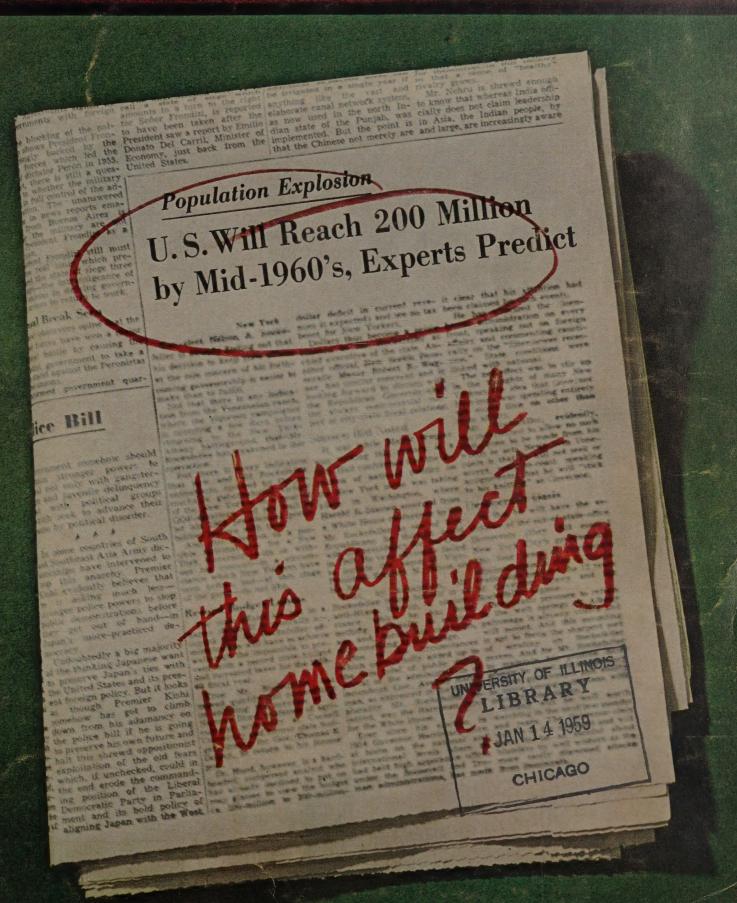
JANUARY 1959 SIX BOLLARS A YEAR-ONE BOLLAR A COPY

ouse lome

ITECTS · APPRAISERS · BUILDERS · CONTRACTORS · DESCRATORS · DEALERS · DISTRIBUTORS · FRA.VA · MARUFACTURERS · MORTGAGEES · PREFABRICATORS · REALTORS



Add Splendor to Your 1959 Home



A COUNTY OF THE COUNTY OF THE

"Sales-Minded" Builders Choose NuTone

Hood-Fans ... Exhaust Fans ... Food Centers

ange Hood-Fan gets rid of cooking odors. W





NuTone's Range Hood-Fan .. acts like a huge vacuum to keep kitchen air fresh.



NuTone's Exhaust Fans get rid of cooking odors grease, steam, excess heat.



NuTone's Food Center . . saves space. One built-in motor for SIX appliances.



NuTone's Oven Hood-Fan traps the scorching heat when oven door is opened.

. With Mulone Blectrical Built-Ins



NuTone Intercom-Radio master control is on kitchen wall and remote station above the sofa in living room . . . NuTone Door Chime on wall inside doorway.

"Sales-Minded" Builders Choose NuTone

Door Chimes . . . Intercom-Radio - Music



NuTone's Intercom-Radio is a blessing for a busy mother..saves her walking to far-away rooms. Fills the home with music and favorite radio programs.



NuTone Door Chimes make any home more inviting.. with a friendly "hello" for friends and family. A musical welcome that's so soothing and cheerful.

✓ NuTone's DeLuxe Intercom-Radio is AM &

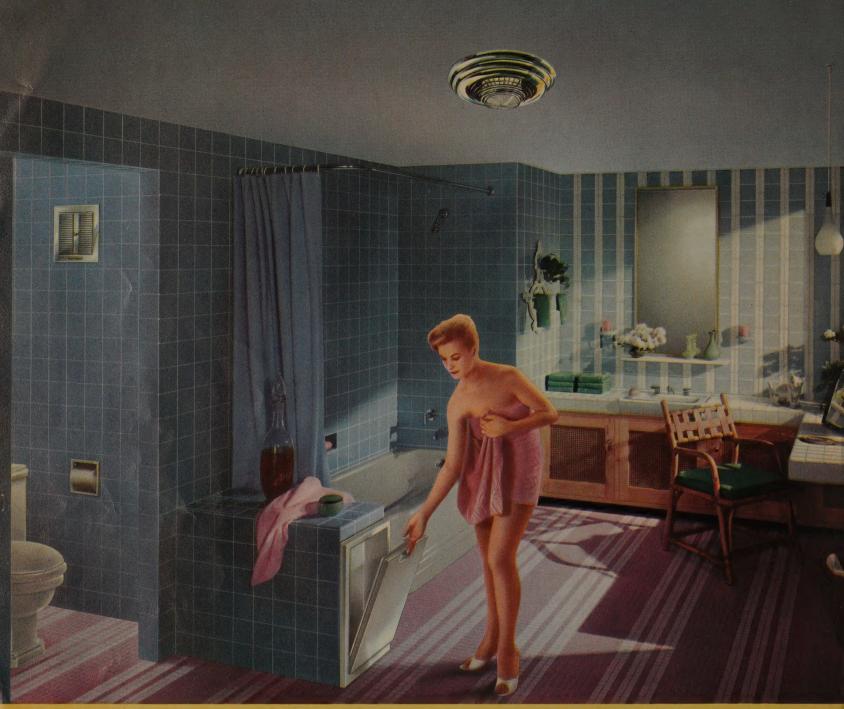


SEE NEXT PAGE -

JANUARY 1959

For Comfort and Safety in Every Bathroom!

Nulone Built Ins



athroom by American Olean Tile . . NuTone Exhaust Fan in wall . . NuTone Ceiling Heat-A-VentLite — 3 bathroom conveniences in one* , . NuTone Built-In Scale folds out of way

"Sales-Minded" Builders Choose NuTone

Ceiling Heaters... Exhaust Fans... Built-In Scales

eat-A-VentLite is Heater, Fan and Light





NuTone's Ceiling Heaters provide instant heat on chilly mornings. They're safe — no danger of burns.

Luxurious NuTone Built-In Scales are so convenient for <u>daily use</u> . . to help control overweight problems.

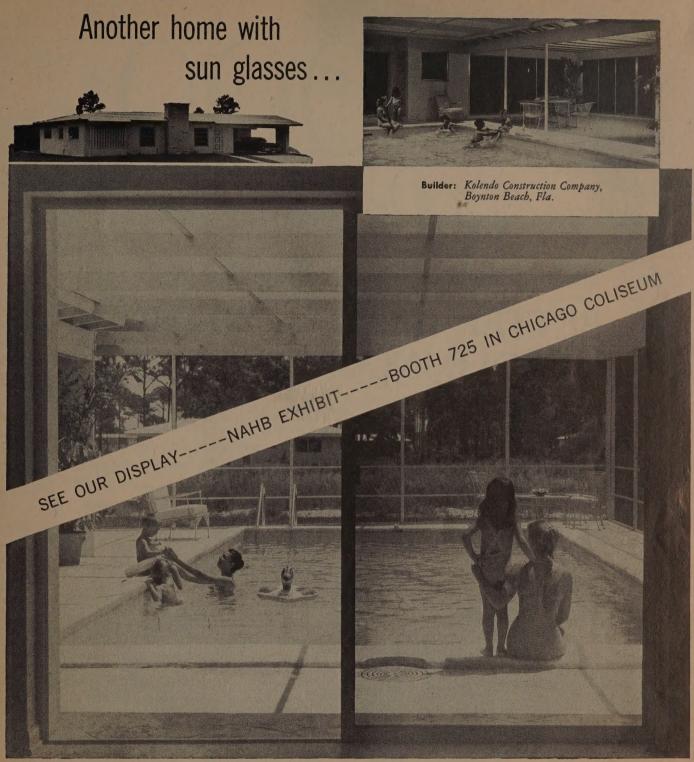


NuTone Bathroom Exhaust Fans get rid of damp moisture condensation . . avoid lingering bathroom odors.

Send for FREE...

1959 DELUXE CATALOGS IN BINDER!

Write to NUTONE, INC., Dept. HH-1,
Cincinnati 27, Ohio



WSW 7316-B

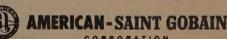
AMERICAN Lustragray glass walls

reduce sun glare and heat without sacrificing vision

Lustragray makes for the "easiest livin' under the sun"—a fact that's apparent to home buyers at a glance. Besides effectively reducing sun glare and heat, Lustragray provides cheerful "clear glass" vision from the interior, added privacy from the exterior.

Lustragray's expensive appearance will give your homes greater sales appeal at very little cost. Write us today for complete information and for the name of your nearest glass distributor.

AMERICAN WINDOW GLASS DIVISION





General Offices: FARMERS BANK BUILDING . PITTSBURGH 22, PA.

AMERICAN-SAINT GOBAIN CORPORATION is a merger of the former American Window Glass Company, Pittsburgh, Pa., and the former Blue Ridge Glass Corporation, Kingsport, Tenn. (which was a wholly-owned subsidiary of Saint-Gobain of Paris, France). American Window Glass Division plants are located in Arnold, Jeannette, Ellwood City, Pa., Okmulgee, Okla. Blue Ridge Glass Division plant is located in Kingsport, Tenn.

MASTIC TILE CORPORATION OF AMERICA

announces a

\$25,000 Annual Design Competition

to stimulate a major contribution to

BETTER LIVING FOR THE MIDDLE INCOME FAMILY

Large scale development of homes known as "Tract Housing" is a field in which the architectural profession has not been significantly active in recent years. Yet such developments are the only areas where many families can turn for the solution of one of the great human needs—a place to live and

rear a family. It is hoped that through the medium of this competition an awakened professional and student interest will be directed to the problem of better living for the middle income family and that a closer amalgamation between the architect and the large scale operative builder will be encouraged.

APPROVED BY THE COMMITTEE ON COMPETITIONS OF THE AMERICAN INSTITUTE OF ARCHITECTS

Swards

OPEN TO ALL CONTESTANTS

2nd prize	5,000.00
3rd prize	3,000.00
Merit Awards: 4 of	\$250.00
UNDERGRADUATE STUDENTS ONLY	
1st prize \$	2,500.00
2nd prize	1,500.00
3rd prize	1,000.00
Merit Awards: 4 of	\$250.00

Grand prize \$10,000.00

Jury

PIETRO BELLUSCHI,

Dean, School of Architecture, M.I.T., F.A.I.A.

EDWARD H. FICKETT, A.I.A., Los Angeles, Calif.

GEORGE FRED KECK, R.A., Chicago, Illinois

JOSEPH H. ORENDORFF,

Special Assistant to the Administrator,

Housing & Home Finance Agency

REGINALD ROBERTS, A.I.A.,

San Antonio, Texas

Professional Adviser

A. GORDON LORIMER, A.I.A.



OPEN TO:

Registered architects of the U.S.A. and Canada.

Architectural assistants to registered architects.

Undergraduate students of schools which are members or associate members of Collegiate Schools of Architecture as of 1958/59 and to Graduates of such schools.

Note: Special awards for undergraduate students

not successful in general competition. Students winning a major award will not be considered for student awards.

Endorsed by the National Institute for Architectural Education.

ENTRANTS ARE REQUESTED TO REGISTER PRIOR TO MAY 15, 1959

Mastic Tile Corporation of America Dept. 14-1, P. O. Box 128, Vails Gate, N. Y.

I intend to enter the Mastic Tile Corp. design competition. Please send me ______ additional copies of the program for the design competition and an 8" x 10" reproduction of the tract plot plan.

Name____

Address City Zone State

ADDITIONAL ENTRY FORMS ARE AVAILABLE FROM MASTIC TILE CORPORATION, THEIR REPRESENTATIVES AND DISTRIBUTORS.

MASTIC TILE CORPORATION OF AMERICA · Houston, Tex. · Joliet, Ill. · Long Beach, Calif. · Newburgh, N. Y.

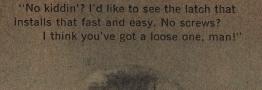
QUALITY CONTROLLED

Vinyl Tile • Rubber Tile • Asphalt Tile • Vinyl-Asbestos Tile • Plastic Wall Tile

without mortising for the latch?
Boy, that's a hot one!"

'Ah, cut the comedy, Charlie. Who

ever heard of installing a lockset





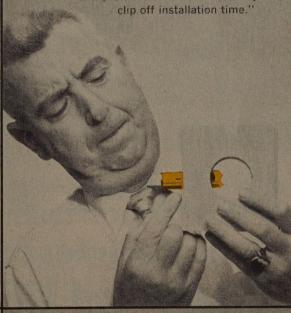
"This it? Great idea...the Kwikset round face latch... with a round face you don't have to mortise the door edge. Pretty cute!"



"So all you have to do is push it into place. I'm with you up to there,
Charlie, but how does it stay in place without screws?"



"I see. These little ridges on the sides hold the latch positioned so it can be installed even before the doors are delivered. What a break for the tract and prefab builders! That'll really



"And you say that the stems on the Kwikset lock anchor the latch permanently? This is really worked



"You know, now that I see it completely installed, I like it better than the old way. And now I don't have to worry about scraping the door paint off the latch face."



"You mean to sit there and tell me this round face job costs the same as a regular latch? No mortising, screws or trouble? I've got it made, Charlie, and you've got yourself an order,"



Product improvements such as the new ROUND FACE LATCH make the KWIKSET "400" Line America's largest selling residential lockset.



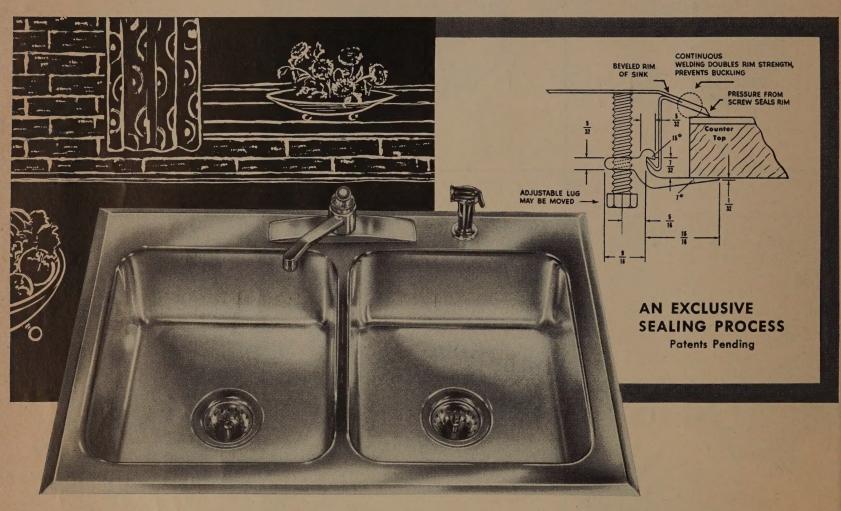
KWIKSET SALES AND SERVICE COMPAN

A subsidiary of The American Hardware Corporatio
Anaheim, California

THE NEW CARLRIM SINK

makes perfect installation so easy!

JUST DROP IT IN THE CUT-OUT COUNTER TOP, THEN TIGHTEN THE ADJUSTABLE LUGS—AND IT'S SEALED IN PLACE FOREVER!



The ULTIMATE in Stainless Steel Sinks for Kitchen Beauty and Efficiency

There's a dollar or two extra for you in every new Carlrim Sink you install—a dollar or two that you will save on installation time. But aside from the extra money you make, you save on costly headaches, too! No more frantic phone calls from homeowners complaining about a rusting or loose rim. No chance of a Carlrim installation ever gathering rim dirt or smelly waste! Here's the most sanitary installation possible when the sink and counter top are of different materials. And, of course, every Carlrim Sink also has all the exclusive features and engineered beauty that have made CARLTON STAINLESS STEEL SINKS the homeowner's preference the world over!

You just <u>can't</u> buy better-when you buy...

Special Note to Installers

All Carlrim sinks fit any standard cut-out. All Carlrim shipments contain simple installation instructions. Carlrim is helio-arc welded all around (not spot welded) so there is no possibility of dimples or spots showing up when the necessary lug pressure is applied during installation.

Ask your wholesaler to show you the new Carlrim design or else write Dept. 391 for the name of the nearest Carlton distributor. Sink Division, Carrollton Manufacturing Company, Carrollton, Ohio.



You'll find a Square D circuit breaker panel exactly like this one in the

YOU CAN LIVE BETTER...ELECTRICALLY.

THIS HOME IS EQUIPPED WITH QO

THE FINEST CIRCUIT BREAKER EVER BUILT!

NAHB Research House in Gouth Bend, Indiana



It's very easy to prove that Circuit Breakers help sell homes!

O Today's home buyers are "housepower"-conscious. The "LIVE BETTER ELECTRICALLY" and "MEDALLION HOMES" programs have focused attention on the home's electrical system. Electrical equipment and appliances now are being provided and promoted as an integral part of the home. It takes adequate wiring to provide for these "built-in" electrical features and others that will be used later on.

When you install QO "qwik-open" circuit breakers in your homes, you have a potent selling feature. You're providing far more than just adequate wiring. You're providing convenience. There are no fuses to replace. Even a child can restore service, quickly and safely. You're provid-

ing modern protection against overloads and "shorts." And—you're providing for extra circuits as they're needed in the future.

You put a proven selling feature to work for you when you install **QO** — finest breaker ever built!

THIS MAY BE FOR YOU

Square D has a "packaged" plan that helps sell homes. If you're interested, clip this panel, attach it to your letterhead and mail it to S. C. Hunt, Square D Company, 6060 Rivard Street, Detroit 11, Michigan.



SQUARE D COMPANY

This is worth knowing about. Why not get the story?



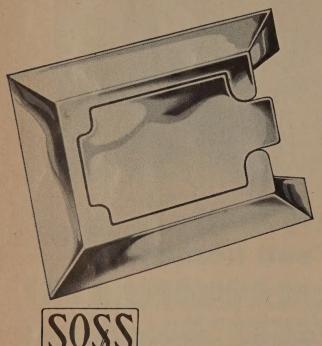
ouis the XIV thought this was the berries!

When France was frisky, And Louis was risqué This knob opened doors To many boudoirs.

(Finish this line in 25 words or less.)



TODAY there's a Better Way.... thanks to MODERN



Replaces knobs. Makes it possible to easily open doors with the flick of a finger. Extremely low in cost. Can be installed on any door in less than 5 minutes! Modern design beautifully compliments contemporary architecture. Available in all standard U.S. finishes.

LATCH





Eliminates ugly protruding hinge butts. Entire hinge is hidden from view when doors or lids are closed. Used the world over, in all type buildings, whenever

the ultimate is demanded in materials and design. Available in a wide range of sizes for nearly every wood or metal application.





In those instances where it is mandatory to use a butt hinge this one does the job in a very

complimentary way. The low price makes it doubly attractive.

For complete information and prices on these advanced SOSS Products see your nearby building supply dealer or hardware dealer or write:

SOSS MANUFACTURING COMPANY

P. O. Box 38 • Harper Station DETROIT 13, MICHIGAN



TRY THESE COST-CUTTING BOSTITCH TOOLS ON YOUR JOB

See how they boost your profits wherever you use them

Rugged Bostitch tools speed work on hundreds of building jobs. Every time you use one, you save time. The time you save means jobs completed sooner—and at more profit.

Time saved is money saved. That's extra profit. When you lower costs, you can bid lower . . . get more contracts, too.

Try Bostitch tools on your jobs. See how savings mount

and your profits increase. Most building supply dealers have them.

Fasten it better and faster with



521 BRIGGS DRIVE, EAST GREENWICH, R. I.

BEFORE YOU INSTALL ANY

Harris BondWood gives you these exclusive benefits

ELIMINATES 98% OF CALL BACKS



SOLID HARDWOOD FOR MASTIC INSTALLATION

BondWood Units are 5/16" x 19" x 19" composed of 16 squares 4-3/4" x 4-3/4", consisting of several small slats and held together with paper which is removed during installation.

ADDS BUYER APPEAL





Greater Stability

BondWood changes grain direction every 4-3/4", resulting in minimum contraction and expansion. BondWood does not buckle, when laid according to our instructions.



Unlimited Patterns

Bond Wood can be installed in a variety of patterns-plain, with divider strips, with insets, etc.... flexibility, because of Bond Wood's unique construction. Available in Oak, Walnut, Maple, Beech, Cherry and other domestic and imported hardwoods.

HARRIS BondWood -so outstanding, sales

FLOORING—READ THIS!



Tighter Fit

Exclusive adhesive and unique construction prevents shifting-makes BondWood the most stable parquet you'll ever step on! Installs equally as well over concrete or wood sub-floor.



Refinish More Times

BondWood provides a full 5/16" of wearing surface—can be refinished countless times without hitting a core or tongue-81.8% thicker than laminated block.



Eliminates Squeaks

BondWood is solid hardwood, without tongue and groove-no hollow noise, no squeaking!



No Dirt-Catching Cracks

BondWood units are unbeveled, square-edged, with flush joints-no gaps, no cracks to catch dirt!

doubled in 1958!

Harris Manufacturing Company, Dept. HH-19 Johnson City, Tennessee. Quality

JANUARY 1959



SINCE 1875 ...

A COMPLETE AND DEPENDABLE

ALL-IN-ONE SOURCE FOR

QUALITY MILLWORK . . .

Years of insistence on quality . . . on crafts-manship . . . on interested service and cooperation go into every item of Qualitybilt Woodwork. This is your assurance of customer satisfaction . . . profitable repeat orders . . . the "reason why" that the Qualitybilt name has become synonymous with outstanding value in Birch cabinets, Ponderosa Pine windows and casements, hardwood and softwood doors; also—mantels, china cases, stair parts, etc. Ask your supplier for Qualitybilt by name! Let us prove how this complete line will meet your every requirement.

VISIT OUR DISPLAY AT
THE NAHB SHOW
BOOTHS 577-578-579
HOTEL SHERMAN

CABINETS

·KITCHEN ·WARDROBE ·BATHROOM

DOORS

- · PANEL
- · FLUSH
- · LOUVER
- · FOLDING

WINDOWS

•AWNING & HOPPER
•CASEMENT •SLIDING
• DOUBLE HUNG

A COMPLETE LINE of BUILDING WOODWORK

FARLEY & LOETSCHER MFG. CO.

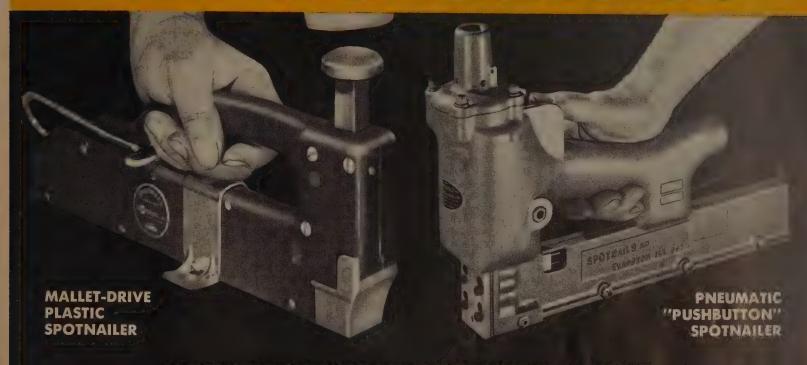
DUBUQUE, IOWA

ENTRANCES • DOORS • FRAMES • SASH • BLINDS • CASEMENTS • SLIDING DOORS • SCREENS • COMBINATION DOORS

STORM SASH • GARAGE DOORS • MOULDINGS • INTERIOR TRIM • SASH UNITS • LOUVERS

KITCHEN CABINET UNITS • CABINET WORK • STAIRWORK • DISAPPEARING STAIRS • "FARLITE" LAMINATED PLASTICS

SPOTNAILS MEET F. H. A. STANDARDS



Here is a new experience! 2 men carry material to point of use. One man "Spotnails" the pieces in place so fast 2 men can't keep up. Spotnailers drive fasteners up to two inches long—3 per second—without operator fatigue. You can set up an on-the-spot production line on every job.

NOW.

Increase Production and Reduce Net Costs with Heavy Duty Galvanized Spotstaples















SPOTNAILS, ING.

EVANSTON, 10
ILLINOIS

STUDENT ARCHITECTS!

EDISON ELECTRIC INSTITUTE

announces the 1959 annual

FOR

MEDALLION HOME
DESIGN COMPETITION
FOR
STUDENT ARCHITECTS

For official entry form, rules, and additional information to help you win, mail coupon today

\$18,000 in Cash Awards

4 First Awards \$2000 each

16 Honorable Mentions \$400 each

Additional Awards to all winners' schools (equal to 25% of winning students' awards)

A Special Certificate to every entrant

National publicity for winners' plans

(Approved by the Committee on Competitions of the American Institute of Architects.)

Who may enter:

Any student presently enrolled in an accredited architectural school.

What to do:

Design a Light for Living—Medallion home, any style, with special emphasis on lighting and electrical living.

When to enter:

Competition closes March 1, 1959.

How the competition will be judged:

A competent jury will judge the competition on the basis of (1) best practical lighting design, and (2) best architectural design for the region in which it is submitted (Northeast, Southeast, Southwest, Northwest).

Light for Living Competition Edison Electric Institute (Room 29) 750 Third Avenue, New York 17, N. Y.

Gentlemen

Please send me, immediately, entry form and reference materials for the 1959 annual Light for Living—Medallion Home Design Competition for Student Architects.

NAME		
ADDRESS		
NAME OF SCHOOL	,	

Broan set out to design a fat bettet Ceiling Heater and Light Combination and here it is—the Broan Leader It's even a leader in price

Exhibiting at NAHB Show Coliseum BOOTH 979

You'll see many points of superiority in this new Broan fixture:

- Abundant heat 1500 watts 5000 BTU. Propels a gentle, diffused stream of warm air downward over a wide area. NOT a drafty jet stream from a high-velocity blower.
- Greatly improved illumination 120 watts of intensified, glare-free lighting, flooding from a large, prismatic crystal lens not frosted glass.
- 3 Stainless steel grille with lifetime mirror finish unaffected by bathroom moisture.
- Easiest fixture of all to install. Electrician completes all field connections in outlet box in housing when roughing in. No other electrical work. Unit installs later swings into place plugs in automatically. No trailing wires.
- 5 Safe thermal overload protected.
- Compact design. Fits between 6" joists. $11\frac{1}{2}$ " square housing; $13\frac{1}{2}$ " square grille gives ample overlap. A single, economical installation for both heat and light. Vibration-free housing.
- Costs less than other units and costs less to install. 5-year guarantee.

See your wholesaler or write for information.



Fast, EASY Installation

Brown MANUFACTURING CO., INC.

924 West State St., Hartford, Wis. (Near Milwaukee)

Specialists in Quality Ventilating Equipment for More than 25 Years

Identical Twin Unit In Ventilating Fan and Light No. 610



This unit exactly matches the Ceiling Heater and Light; teams beautifully with it to make an outstanding twin light installation. Alone, it provides a luxury touch at a budget price. Has the same stainless steel grille as the twin unit, with air intake all around. Backdraft damper fits snugly against resilient gasket. Economical — one installation serves a double-purpose fixture. Uses 3" round duct. Single or double switch; fan time-switch available. Five-year guarantee.



Field connections are completed when housing is installed. No further electrical work.



Unit hooks on hinge pins — swings up — plugs in automatically.



A single thumb screw fasters lens and grille securely.



Don Kilps discusses the planned telephone facilities of his 1958 "Parade" home with Al Braun, of Wisconsin Telephone Company. At right, he points out one of the 16 telephone outlets going into his own new home, now under construction.

"90 per cent of our prospects want a telephone-planned home"

-SAYS DON KILPS, CUSTOM BUILDER OF MILWAUKEE, WISCONSIN

"We build for discriminating buyers who want custom advantages in their homes," says Mr. Kilps. "So we provide plenty of telephone outlets—for portable as well as permanent phones"—and with wiring fully concealed.

"Telephone planning is a first-rate sales feature. Prospects can see the virtues of hidden wiring and planning for growing telephone needs. In fact, 90 per cent of them comment on it. And, working with the telephone company, we find it costs us so little to offer it."

Mr. Kilps is General Chairman of Milwaukee's 1959 "Parade of Homes," which will feature

exhibit homes by more than 60 registered builders in the area. His contribution to the 1958 "Parade" is shown above.

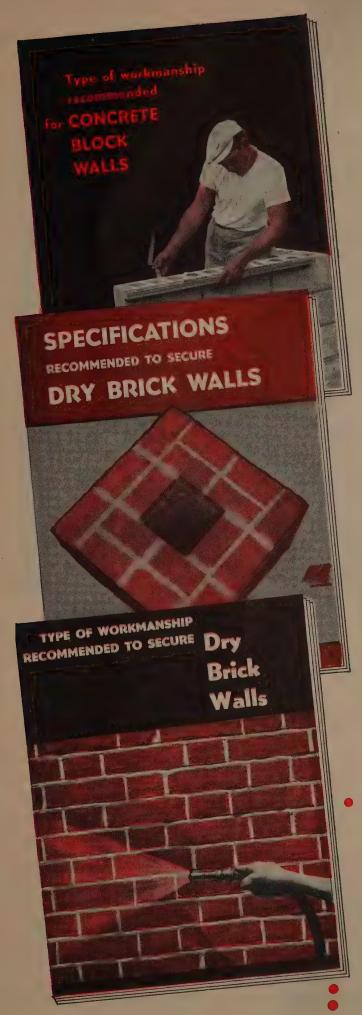
Wm. Kilps Sons build about 50 units a year in the \$12,000 to \$50,000 price range—and telephone planning is a feature of every one.

Your local Telephone Business Office will be glad to help you with telephone planning for your homes. For details on home telephone installations, see Sweet's Light Construction File, 8i/Be. For commercial installations, Sweet's Architectural File, 32a/Be.

BELL TELEPHONE SYSTEM



BUILDERS: Attending the NAHB Convention in Chicago? Be sure to visit the Bell Telephone System exhibit, Conrad Hilton Hotel—booths 15 and 16.



GET THESE IMPORTANT BOOKS!

THE three books at the left are a "must" for anyone who is interested in good masonry construction. One describes the type of workmanship recommended to secure dry brick walls. The second describes the specifications recommended to secure dry brick walls. The third describes the type of workmanship recommended for good concrete-block walls.

Each of these books has been endorsed by foremost authorities. Each has received a citation of merit from the Producers' Council and the American Institute of Architects. Each is fully illustrated, clearly written. Each contains a wealth of really valuable information.

These books are *not* advertisements for our product, Brixment. They are published and made available to members of the building trades solely as an industry service. Mail the coupon, *today*, for your free copies.

LOUISVILLE CEMENT COMPANY, LOUISVILLE, KY.

Manufacturers of

BRIXMENT FOR MORTAR

Louisville Cement Company—Dept. HH-8 Second and Walnut Streets, Louisville 2, Kentucky
Gentlemen:
Without cost or obligation, please send me a copy of each of your three books on masonry construction.
Name
Firm
Street
CityState

Add to the beauty and liveability of your bathroom



Inch for inch, the bathroom gets more hard wear than any room in the house. Making it into a showplace and keeping it that way requires more than good intentions. That's why so many architects, builders, and homemakers specify Hall-Mack Accessories. They know these quality fixtures retain deep, gleaming beauty under rugged usage. And they recognize at a glance the highly original ideas that make these accessories extra convenient for family and friends. Skillfully designed to blend with any decor, these famed accessories combine sparkling beauty and unusual utility to add real livability to this important room. Hall-Mack Accessories . . . first choice far and away.

	MPANY Division of TEXT lvd., Los Angeles 7, California	
Please send your FR	REE color booklet of new bathr	oom ideas
NAME		
ADDRESS		
СІТУ	ZONESTATE	HH-I

HALL-MACK®

bathroom accessories in sparkling chrome



New chrome plated Shower Recess Unit --handy, safe spot for shampoo bottles, etc.



Sold by leading plumbing, tile, and hardware dealers everywhere,

the profit line for '59

BESTWALL GYPSUM BUILDING PRODUCTS

First with Glass Fiber Reinforcement



Bestwall Gypsum Wallboard is reinforced with glass fibers for greater strength. You'll find less cracking, easier scoring and snapping, less shipping damage, less breakage on the job. Available plain or pre-decorated. Line includes Insulating Board plus Firestop Bestwall for fire-rated construction.

Bestwall Gypsum Plasters are "plastisized" for smoother working, longer storage life, less droppings, no balling, faster clean up. Available neat and mill-mixed, fibered and unfibered, also designed for machine application. Fibered basecoat plasters contain glass fibers for greater strength, easier working

Bestwall Gypsum Sheathing is reinforced with glass fibers to give greater structural strength and fire resistance. Core and papers are water repellent; tongue and groove V-edges. Light weight means easier handling, faster installation.



SHEATHING

See the Bestwall Gypsum "Profit Line for '59" at the NAHB convention — Chicago — Hotel Sherman—Booth 469—January 18–22



Bestwall Gypsum Company • Ardmore, Pennsylvania • Plants and offices throughout the United States

"OUR DEPENDABLE FORD SIX IS ALWAYS ON THE JOB!"



says Harold G. Strait
Strait's Hardware
Mansfield, Pennsylvania

"We bought our pickup in '55 and haven't had the head or pan off.

It starts real easy, even in the coldest weather.

"And this Ford F-100 pickup is sure economical! We get good gas mileage, and I don't even remember having any troubles with it, or spending one dime on repairs. All

we've done is had it greased and the oil changed regularly.

"We have the *Custom* Cab, and it rides well and makes driving easier. Another reason for having a Ford truck is the confidence I have in our local Ford Dealer.

"This store was started by my father in 1891 and I've been in the hardware business for 38 years. We do plumbing, heating and air conditioning, too! I've used Ford trucks beginning with the model T, and plan to get a '59 Ford pickup soon."





Go FORD WARD for savings, with '59 Ford Trucks!



Join the *Ford*-ward march to savings! Whatever your job... wherever you do it... you'll discover, just as Mr. Strait did, that a Ford truck is your best investment. And for '59 there are even more reasons to make this worthwhile move. You'll find:

Husky new ½-ton Panel (pictured above) offers 158 cubic feet of loadspace on 110" wheelbase. All-steel body and weather-sealed plywood floor make this an excellent truck for hauling all types of tools and equipment

New gas economy in the industry's most modern 6-cylinder engines

Rugged durability in the box girder construction of the Styleside pickup's cabwide box

Wider choice of transmissions including Ford's new Heavy Duty Cruise-O-Matic

Smoothest ride of any half-ton pickup

And for the 13th straight year, independent insurance studies prove that Ford trucks last longer! For a truck that goes all out to save time, work and money on *your* job, see your local Ford Dealer and go *Ford*-ward for savings!

FORD TRUCKS GOST LEGS

LESS TO OWN ... LESS TO RUN ... LAST LONGER, TOO!

The "hidden quality" of Long-Bell Plywood is in the laminations. Hidden from the most practiced eye is sound, firm wood fully up to grade with proven and tested glue line. Herein lies the secret of Long-Bell Plywood's greater uniform strength. This is where "hidden quality" really counts.

There's a Long-Bell Plywood made especially for your job; paneling, sheathing or marine use . . . interior and exterior.

And, even though we think we have the best plywoods ever made, we're constantly working to improve them.

That's why you're years and dollars ahead with Long-Bell Plywood . . . the plywood with "hidden quality".

From 27 Modern Plants— Long-Bell Supplies These Quality Wood Products:

LUMBER: West Coast Fir, Hemlock and Cedar, Ponderosa Pine, California Douglas and White Fir, Southern Pine and Hardwoods.

OAK FLOORING

MILLWORK &
FACTORY
PRODUCTS: Douglas
Fir and Ponderosa
Pine Window and
Door Frames, Window
Units, Sash and Doors,
Glazed Sash, Industrial
Cut Stock, Ponderosa
Pine Box Shook. PILYWOOD: Fir, Knotty Idaho White Pine and Ponderosa Pine, FirTexture 1-11, Birch, Philippine Mahogany, Plyron and other special items.

LONG-BELL FLAKEWOOD® FLAKEWOOD®
LONG-BELL
VEN-O-WOOD®
PRESERVATIVE
TREATED
PRODUCTS: Lumber,
Plywood, Posts, Poles
and Piling pressure
treated with Creosote,
Pentachlorophenol
("Penta") and
Wolman Salts®
KITCHEN
CABINETS: Rift
Grain Fir and Birch
Fronts.
PREFABRICATED PREFABRICATED TRUSSES AND FRAMING. WORTHWOOD End Grain Strip FLOORING.

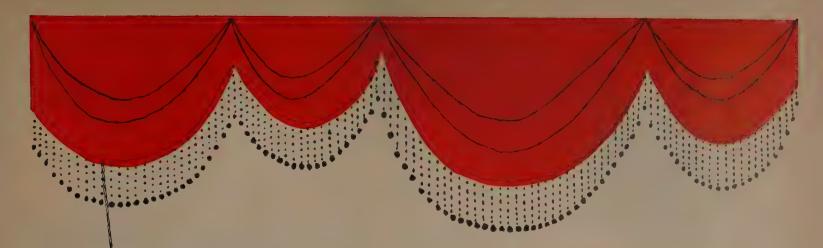
it's what you

that makes it better . .

long-Rell PLYWOOD



INTERNATIONAL PAPER COMPANY/LONG-BELL DIVISION/KANSAS CITY, MO./LONGVIEW, WASH.



1959 MAGIC CHEF BUILT-IN GAS RANGES

the gas range American housewives know best!

CURTAIN GOING UP at the NAHB convention



More women cook on Magic Chef
than any other gas range

MAGIC CHEF built-in ranges on display in the unified AGA exhibit

BOOTHS 793-794 in the CHICAGO COLISEUM



Outdoor Romar Pool — Fully-equipped Romar Pool with advance-design pool patio . . .
new home of a professional man in an Eastern Seaboard city.

ONLY a few years ago, the residential swimming pool was an afterthought luxury addition to properties of the very wealthy. Today our *Romar* dealers are selling them everywhere as low-cost options — or integral equipment — with properties in the \$20,000 to \$35,000 bracket.

Home swimming pools, outdoor and indoor, have arrived! No longer a fad, they're a solid and salable feature. Better class home buyers want them and will pay for them (at \$2,000 to \$4,000 installed, including a tidy dealer profit). And now *Romar*, a pool industry pioneer, has established the policy of franchising Merchant Builders as its primary sales-installation outlets.

Consumer demand for the "packaged estate" — the property with a Romar Pool as its built-in recreational and entertainment center—is based on realities. Crowded public and private pools and beaches, jammed highways, high vacation costs, larger families, more youngsters and adults enjoying swimming and bathing — all these and more are forcing families to stay at home, play at home.

What is more natural, then, than for middle-income families to regard a fully-equipped quality pool — sold and installed by their builder — as a good investment increasing property values? And what is more wise for you . . . seeking to increase your 1959 sales and profits . . . than to cash in on this rapidly developing market before your competitors do?

Packaged Estate, \$24,000—Three-bedroom ranch with Romar 15'x 30' Pool in completely fenced pool patio...Midwestern city, high construction costs.



Indoor Romar Pool — Romar Pool in moisture-sealed pool from off family room in new home near Midwestern city. Four-bedroom split-level type home, 1,860 sq. ft., 2-car garage with pool, sold for \$28,500 plus land.

Charter Member, National Swimming Pool Institute

Member, National Association of Home Builders



BUILDER BENEFITS with Romar Pools

- 1. Substantial profits on every sale: your installed cost \$1,100-\$2,400; your sales price \$2,000-\$4,000.
- Single-source warranty: Romar gives one-year Manufacturer's Warranty on all equipment of Romar manufacture.
- Installed and shown with your model homes, a great new talking point for open house promotions and tie-in sales.
- 4. The "second sale": go back and sell recent customers a Romar Pool . . . use your salesmen, crews and equipment in the off season.
- Sell customers of others: where new or older homes have space for outdoor pools, sell them and add a department to your business.
- **6.** Attract better buyers, people with more cash, by selling pool-equipped homes . . . step up out of the competitive rat race.
- Romar Pool packages are complete: everything you need from filters to underwater lights, from liners to ladders (send for list).
- B. Complete sales, installation and advertising aids...including the industry's best installation manuals and tips on indoor/outdoor pool designs.

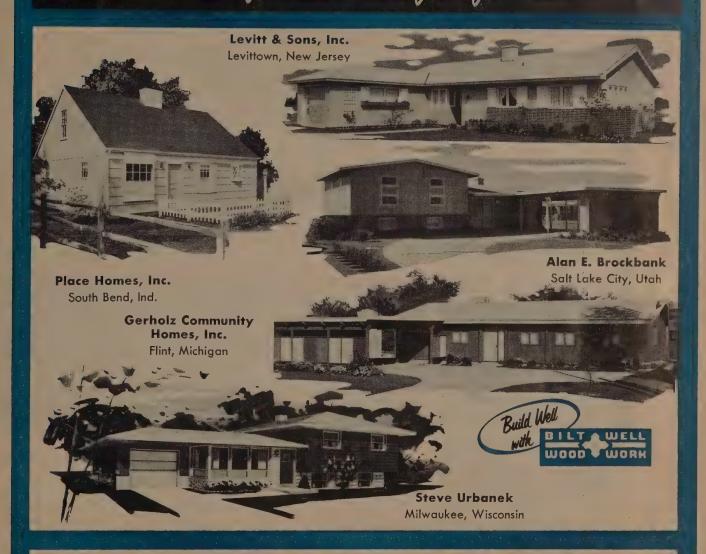


Merchant Builders Get the Romar story personally from our president, Philip Roden, at the NAHB Convention and Exposition. See our display, Space 929, Chicago Coliseum, or contact us at the Conrad Hilton.

America's Leading Builders feature

BILT-WELL WOODWORK

in their homes...for labor savings...for easier sales



See the

BILT-WELL all-new streamlined casement
BILT-WELL Super 7 removable double-hung window
Versatile BILT-WELL 3-way awning window
Popular BILT-WELL kitchen and storage cabinets
Exciting New Orleans doors

at the NAHB Show in Chicago

January 18 to 22, 1959
Visit our display at Hotel Sherman—Booths 558, 559, 560
See exciting, profit-building new features! Learn why





BILT-WELL Twin-system Weatherstripping (one of vinyl tubing and one of stainless steel) plus snapon storm panels or insulating glass are lifetime money savers that reduce heating costs as much as \$28 a year for twenty window home.



NEW BILT-WELL concealed hinges (eliminates protruding hardware on exterior—streaking paint from rust and corrosion) give uncluttered appearance. Prowler-proof—dependable—fully guaranteed.

All new streamlined design

BILT-WELL Casement

with concealed hinges for beauty, and unitized sill gives builders unique opportunities for creative window arrangements!



Sleek BILT-WELL casement has unitized sill, integral with frame which offers the utmost in design flexibility and simplicity. It permits speedy, economical installation. Both length and height-wise arrangement combinations are unlimited as any number of units can be grouped without the need of installing long cumbersome sills.



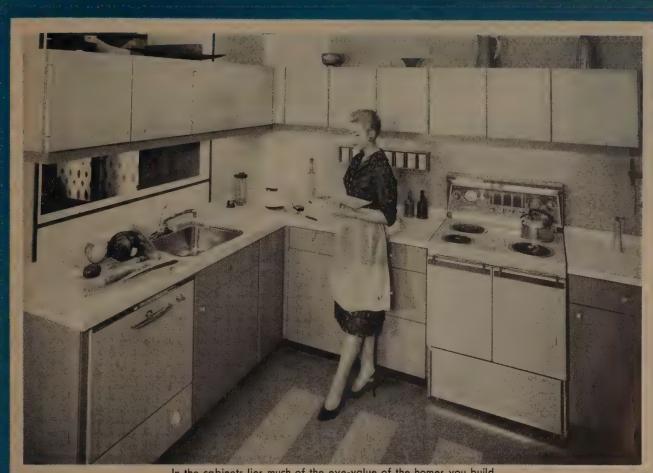
Easy-opening BILT-WELL casement features full right-angle opening. This provides adequate space between the edge of the sash and frame for cleaning the exterior surface of the glass. Painting as well as cleaning is facilitated by the absence of protruding hinges or hardware.

When you use the all new BILT-WELL stream-lined casement you profit three ways. You add exclusive sales features. You reduce labor costs. You build your reputation.

Build Well

BILT WELL

WOOD WORN



In the cabinets lies much of the eye-value of the homes you build.

Eye-Value is Buy-Value!

BILT-WELL Cabinets

sell homes fast!



BILT-WELL Storage Walls increase home "saleability"

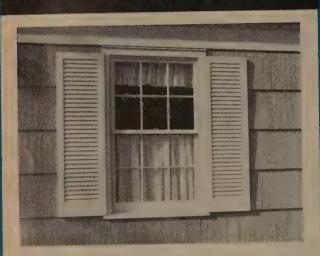
BILT-WELL cabinets in this beautiful BILT-WELL-FRIGIDAIRE "NORDIC" kitchen are an example. Their unmatched flexibility makes them perfect for every storage need. Unlimited arrangements possible in beautiful clear select birch or warm Ponderosa Pine. Wall and base cabinets are built in 3-inch modules from 15" to 48", semi-assembled, ready to install. Drawers and doors operate smoothly, easily, silently. All the advantages of custom-built kitchens at a fraction of the cost.

Here's another big feature to offer in the homes you build. You can divide floor areas with BILT-WELL storage walls and cut labor costs appreciably. Every variety of drawer and door storage. You can use BILT-WELL Cabinets in living room, playroom or child's room as well as in kitchen. A variety of vanity arrangements for bedrooms and bathrooms. Louvered doors to add a luxurious touch.

BILT-WELL products are supported by an aggressive program of National advertising that familiarizes your prospects with the BILT-WELL namel

BILT-WELL SUPER 7

removable double-hung windows offer seven big features!



- 1. Easily removable from inside without sacrificing weather-tightness
- 2. Unitized sill facilitates groupings
- 3. Counter balanced-flat over head balances
- 4. Completely weatherstripped
- 5. Manufactured from clear, kiln-dried Ponderosa pine, water-repellent preservative treated
- 6. Standardized-fit all standard walls
- 7. Guaranteed. Bear AWWI seal of approval

Standard sizes: Sash Opng. Widths 1'-8" thru 3'-8"; Heights 2'-10" thru 5'-6"

If you're looking for window flexibility, look at

BILT-WELL AWNING WINDOWS



They're *versatile*—You can use same basic window as hopper, awning or fixed window, as casements or in combination with picture windows

They're weathertight—Completely weatherstripped with rolled-on anodized aluminum top and bottom of sash and sides of frame

They're selective—You can choose any of four operators—jointed bar, rigid bar, lever or gear type operator

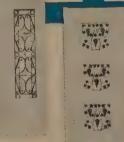
They're quality—Manufactured from clear, kilndried Ponderosa pine, water-repellent preservative treated

Awning windows from 28" x 14" to 44" x 30" glass sizes

Picture sash from 36" x 40" to 44" x 48" glass sizes

Popular, exclusive doors by

BILT-WELL



The New Orleans—12" x 48" glass panel with fired ceramic decorative designs fused into the glass. The last word in attractive design.

The Belvedere—three 16" square panels of decorative glass, plain glass or raised wood panels give this door its up-to-the-minute beauty.

Both available in kiln-dried all clear Ponderosa pine.

Don't miss our display of BILT-WELL new and improved wood products at the Chicago NAHB Show! Hotel Sherman, Booth Nos. 558, 559, 560.



CARADCO

| N C (formerly Carr, Adams & Collier Company) Dubuque, Iowa For complete information on BILT-WELL Products see Sweet's Architectural 17c/Car and 24b/Car, or Sweet's Light Construction 6c/Car and 12a/Car

All new...built-to-sell

ROPER

GAS RANGES



Help your kitchens sell your HOMES!

Build extra selling power into your homes! Install brilliant, all-new Roper gas built-ins. Smart, modern styling sells on sight. Roper's reputation identifies your homes as top quality. Customer satisfaction assured by Roper dependability and cooking advances. Easy, economical to install. Feature fast, clean, modern Roper gas built-ins... and sell!

MAIL COUPON TODAY

Geo. D. Roper Sales Corp., Kankakee, Illinois Please rush full information on the new Roper Gas Built-Ins.

Firm					
Individual					
Street Address					
City	State				
am a	(type of business)				
My building material supplier is	(name)				
(city)		HH159			

ROPER ADVANCES MEAN
BETTER COOKING...BETTER SELLING!



TEM-TROL TOP BURNER WITH "FLAME-SET" CONTROL

Fully automatic . . . won't burn foods. No potwatching. "Flame-Set" allows choice of starting flame size.



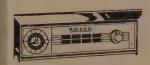
HUDEE RIM

Cooking top mounts snug and flush with counter top. So good looking. Easy to clean, Won't catch dirt.



"THERMO-SPIT" ROTISSERIE

Dial on spit shows internal temperature of meat as it barbecues. Accurate . . . no guesswork. Easy to read.



SMART NEW STYLING

Crisp, clean lines look well in any kitchen. Choice of four colors or rich Satin Chrome metallic finish.

GEO. D. ROPER SALES CORP.

a subsidiary of Geo. D. Roper Corporation

Kankakee, Illinois

Attention Home Builders!



Now, you can cash in on the exciting publicity and powerful sales-making influence of the famous Mrs. America® program. This service is a Johns-Manville exclusive for home builders. Yes! In the home-building field Mrs. America and all the 49 State Winners in the Mrs. America contest will feature exclusively Johns-Manville 7-Star builders and Johns-Manville building products.

The Mrs. America promotion is only one of many features of the tested and proved Johns-Manville 7-Star Plan. Again in 1959, Johns-Manville will continue to offer 7-Star builders the local newspaper advertising, national advertising and sales aids that last year helped over 435 builders sell more than 29,000 homes.

Before you make final plans for your 1959 homes, learn how the Johns-Manville 7-Star Plan and the Mrs. America promotion can help you sell more new homes. Write for full details to: Johns-Manville, Box 111, New York 16, N.Y.

REG. U.S. MRS. AMERICA, INC.

MEET MRS. AMERICA, IN PERSON, AT NAHB SHOW at Johns-Manville Booths 84-85-86, Chicago, January 18.



JOHNS-MANVILLE

Removable of the second second

makes the big difference

Modern windows, like the modern tractor-trailer unit, are removable. With sash out, builders install the lightened units in half the time—with half the labor—required for ordinary units.

Job site damage and delays are almost entirely eliminated. Painting time is shortened, too, by cutting-in sash separately on easel or bench.





R.O.W SALES COMPANY . 1300-1 ACADEMY . FERNDALE 20,

20

MICHIGAN

custom-created
elegance with the
world's most
economical homebuilding material

RIGHT: Three distinctively different patterns are featured here. At left, an eye-catching offset pattern to give your walls new dimension and interesting shadow play. In the background, a stacked pattern to add quiet dignity to the dining area. Running bond pattern at right creates an expanse of flowing motion while wrapping the living room in timeless beauty. Photograph courtesy "Living for Young Homemakers."



imaginative concrete block for new homes

Elegant wall renditions of Concrete Masonry are setting the trend for 1959! Here truly, is a marriage of fashion and function. So natural in beauty. So profoundly mature. So alive with dimension and design. So unbelievably low in cost. Choose from a myriad of patterns—for block is as versatile as your own imagination. Know a lifetime of priceless security—for block is completely fire-safe. Relax in the comfort of quiet—for block absorbs a maximum of unwanted noise.

Your local NCMA member can give you complete details on all that's new with Concrete Masonry. He's a good man to know. See him soon.

National Concrete Masonry Association • 38 South Dearborn • Chicago 3



ABOVE: Split block exhibits the extreme flexibility of Concrete Masonry. Here an interlocking pattern provides an unusually handsome fireplace. Split block is specially ideal for interior-exterior renditions.

RIGHT: Simplicity and smartness of this horizontally stacked pattern offers natural outdoor atmosphere to the living room and ranks tops with those who want to go modern all the way.



ABOVE: Here is Shadowal block, newest innovation to amazing Concrete Masonry! As light crosses its sculptured corners your pattern is stylishly defined. Now virtually thousands of distinctive wall designs can be created with excitingly new Shadowal block. Pattern shown is hour-glass. Floor is of patio block.

At the NAHB Convention... discover DIXIE Leadership

...the leadership that first developed the newest idea in ranges...

the gas

FOLDS UP FOR COUNTER SPACE

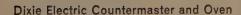


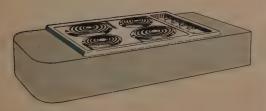
ON DISPLAY
IN THE CHICAGO COLISEUM
BOOTHS 861-862
with the 1959 DIXIE gas
and electric built-in ranges

BUILD WITH DIXIE

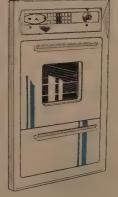
Since the close of World War II, Dixie has rapidly assumed the leadership of the popular-price market in free-standing ranges. Now, in their initial NAHB

exhibit, Dixie is bringing to the built-in field their skill and success in pleasing most American housewives. Now, you can BUILD WITH DIXIE.





DIXIE







DIXIE PRODUCTS, INC.

Cleveland, Tennessee

HOMES WITH

Shakertown GLUMAC

SHINGLE UNITS



GO UP FASTER

HOMES WITH

Shakertown GLUMAC

SHINGLE UNITS



GO UP FASTER ... COST LE

HOMES WITH

Shakertown GLUMAC

SHINGLE UNITS



GO UP FAST

Now you can nail down extra profits on every job. Because Shakertown Glumac Units have a lower applied cost than any other type of siding, you build a better home for less money. Big easy-to-handle Glumac Units can be nailed over studs or sheathing in less than half the time it takes to apply any other siding. Matching colored nails (furnished) and Jiffy Corners make finishing faster and easier! Produced with special backer board for maximum insulation, nationally-advertised Glumac Units are genuine red cedar shingles pre-stained in 12 colors with real sales appeal. Get all the facts before your next start!

CORPORATION



Send today for your free copy of the Shakertown Color Ideabook

S	ha	keri	OW	n	C	orp	ora	tion
-			4	1.1	ш	10		

20310 Kinsman Road . Cleveland 22, Ohio Please send me the Shakertown Color Ideabook.

COMPANY_

ZONE___STATE

Shakertown Regular, DeLuxe & DeLuxe Jumbo GLUMAC UNITS . SIDEWALL SHAKES . STAIN . JIFFY CORNERS





You will sell more houses

There's more to show, more to sell with these complete kitchens!

Here are the kitchens with all the advantages and conveniences "most wanted by most women"! They are beautiful kitchens, with every appliance color-matched and design-coordinated. They are convenient kitchens! Imagine the "desire-to-buy" your houses will arouse when you offer prospects such exclusive better-living features as a built-in oven barbecuer; a refrigerator-freezer with automatic ice maker; a 2-cycle dishwasher with Filter-Stream* washing; a washer and dryer that set themselves; Select-A-Door cabinets that change color in minutes; * Tmk

RCA WHIRLPOOL ... America's first family of home appliances

and many more advantages.

And, they are kitchens that give you big profit opportunities. You obtain everything you need . . . appliances and cabinets . . . from one quality source of supply. Ordering is simpler and less costly . . . service is fast . . . and you get a package deal at a package price. Here's an important extra . . . you can have an RCA WHIRLPOOL kitchen designed for your houses by the staff of a leading magazine "LIVING FOR YOUNG HOMEMAKERS". Write for full details.

Use of trademarks and RCA authorized by trademark owner Radio Corporation of America

Products of WHIRLPOOL CORPORATION St. Joseph, Michigan



with Whinlood kitchens



(1) "Select-A-Door" wall and base cabinets (2) Built-in gas and electric ovens (3) Built-in gas and electric cooking tops (4) Dishwashers (5) Disposers (6) Gas and electric refrigerator-freezers... plus automatic washers, gas and electric dryers, gas and electric washerdryers, air conditioners, combination range-sink tops.

Contract Sales Division Whirlpool Corporation, St Please send me complete RCA WHIRLPOOL kitchens	information on	the new	
NAME	T	TITLE	
FIRM NAME			
FIRM ADDRESS.			
CITY	ZONE	STATE	НН-1

Everything for the modern kitchen with one brand name...RCA WHIRLPOOL Mail coupon for complete details!



CRYSTALITE VINYL TILE



A new dimension of translucent depth for fine residential floors; also for commercial areas removed from direct street traffic. For color selection, call your Kentile Representative for samples, or consult Sweet's

©1959, Kentile, Inc., Brooklyn 15, N Y



IN **GRECIAN MARBLES**



SPECIFICATIONS-

Sizes: Standard —9" x 9", 12" x 12" and 37" x 37" (untrimmed). Special —9" x 18", 18" x 18", 24" x 36", 36" x 36". Thickness: 1/8".

Bright Gold and Bright Silver Feature Strip: $\frac{1}{8}$ ", $\frac{1}{4}$ ", 1" and over widths in 36" lengths.

another exclusive style in KENTILE FLOORS

Roundup:

Mortgage men develop plan to sell shares in FHA loans

A group of mortgage bankers is quietly working on a plan to let them sell participation shares in FHA mortgages to the public and other investors—pension funds, they hope. FHA opened the way for such a setup in July 1957, but no one has tried to do it—primarily because it is too big a job for one firm alone. MBA General Counsel Sam Neel is preparing the necessary complex forms, a prospectus for the SEC and details on interest-bearing obligations which will be marketed.

If such a plan works, it could go a fair distance toward easing what is beginning to loom as a permanent shortage of mortgage money.

First signs of lower discounts on FHA, VA loans

The mortgage market shows signs of another turnabout. After hitting bottom in early November, prices on FHAs and VAs edged up slightly in four cities in December (see p 56D). Many mortgage bankers predict higher prices early this year. In conventional lending, it is becoming clear that few savings & loans will be making the 90% loans just approved by the Home Loan Bank Board (see p 56D).

First report on '58 housing starts: at least 1,105,000

Figures are not final yet but best estimates are that private housing starts in 1958 reached at least 1,105,000—which would make it the biggest year since 1955. Most of the gain came in the last half of the year. The 100,000 private starts in November set a seasonally adjusted annual rate of 1,330,000—highest since July 1955. FHA-financed starts led housing comeback. They accounted for an estimated 26% of private starts vs 16.6% in 1957. VA's share of starts slipped from 13.3% to 9%, conventional's from 70% to 65%.

FHA applications began to slow down in November, another indicator that housing has reached its high (see p 40). But this is still the highest November total since 1954.

Integrationists ask President to fire Al Cole

Ouster of HHFAdministrator Albert M. Cole is being demanded by the Natl Committee Against Discrimination in Housing.

Its ire was stirred up by Cole's surprising stand on the government's role in ending housing segregation. The housing chief let a roomful of reporters at the NAREB convention in San Francisco (Dec, News) understand that the government was under no obligation to impose integration on housing that received federal aid (ie, FHA, VA or public housing).

The committee, representing 28 civic, religious, labor and civil rights groups, wrote President Eisenhower: "Do you approve the statements . . .? If so, how do you reconcile them with your own pronouncements and our constitutional guarantees?" Chairman Algernon Black added that if Cole's stand does not reflect the Presidential view, "we think a change in personnel is indicated."

His letter also charged that Cole's statement is "emphasized" by his past record. "On taking office," it said, "he began emasculating the [HHFA] race relations service." Lately, it added, "he completed the process of destroying [it] by transferring the last two staff members to other and unrelated positions."

A 59-word White House answer came from Rocco Siciliano, special assistant to the President. He wrote that Eisenhower was "deeply concerned about this matter" and the points raised were receiving "careful consideration."

Government starts loan program which can help builders

The government has opened up four new avenues for builders to get help in buying land. The Small Business Administration has just issued final regulations covering a law passed last year which lets small business investment companies be set up to help small businessmen raise capital. The investment companies must have paid in capital of at least \$300,000. But they can borrow up to \$150,000 from SBA for up to 20 years at 5% interest.

Four ways this could help builders: 1) a builder can create a separate corporation to buy, develop and sell raw land and get a loan from a small business investment company for up to 20 years with a renewable provision; 2) an investment company can buy convertible debentures of a land development company which later may be converted into stock; 3) there can be a combination of the first two; 4) a builder can get help for a new subdivision that runs into trouble after it is started.

NEWS continued on p 40

News index

nousing market	40
Builders '59 plans	41
Local markets	45
Market briefs	49
Housing policy	52
Opinions	52
Public housing	56A
Mortgage market	56D
US S&L League convention	60
Mortgage briefs	61
Materials & prices	64
Lumber dealers convention	64
Materials briefs	65
Canada	68
Urban renewal	70B
Segregation	75
Codes	75
People	78
Labor	79
Statistics and indexes	
Housing starts	40
FHA & VA applications	40
Mortgage quotations	61
BLS materials prices	65
Boeckh housing costs	65

NAHB RESEARCH INSTITUTE-MASONITE HOUSE Knoxville, Tennessee

Developed by: N.A.H.B. Research Institute
Consulting Architects: Painter, Weeks & McCarty
Builder: Martin L. Bartling

New Masonite Sunline siding, with preformed ribs, blends harmoniously with the over-all exterior design. Available, at present, west of the Rockies only.





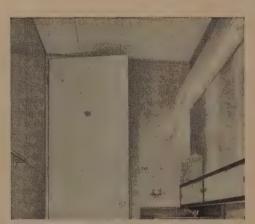
Preview of Masonite's sensational new wall panel. Combines siding framing, insulation and interior wall in one speedily erected 4'x8' panel. One of the most talked-about features of the entire Research House.

Masonite's forecast for tomorrow..

A new wall system...improved storage...more beautiful interiors...all bring faster, easier building and more house quality



Beautiful walls double as storage areas. It's Masonite Panelok, the system that combines a wood-grain pattern on the face with metal lock strips hidden in the joints. These hold any of the easily removed Adjust-A-Bilt* fixtures to create storage spaces or display of family treasures.

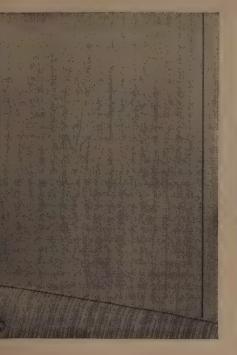


Two baths with but a single tub! Lustrous Marlite plastic-finished panels present a permanent, colorful finish on the walls and ceilings, end worries about heat and moisture.



Why not a door that goes all the way to the ceiling? Masonite did it—and faced it with the handsome Royalcote Misty Walnut skins. No more over-the-door framing.

^{*}Reg. T.M. U.S. Pat. Off. by L. A. Darling Co.





You'll guess way high on the cost of these glamorous walls. They're Masonite® Royalcote, in Misty Walnut wood-grain pattern. They add immensely to that all-important "first impression."

at the NAHB Research House

So much so new in the exciting NAHB Research Institute-Masonite House! So many steps forward in the science of building better, more efficiently. So many dramatic ideas in the art of appealing to prospects, especially those on a budget.

Here you see how Masonite research has brought about new panel products, pleasing in appearance and designed to make application faster and lower in cost. If you cannot visit this house in person, plan to see the demonstration at the NAHB show. Or ask your Masonite representative to show you the working drawings and ask him why they point the way to better building, more value for your customers. Masonite Corporation, Dept HH-1, Box 777, Chicago 90, Ill.



Low-cost feature with big appeal! Masonite heavy-duty ¼" Peg-Board® panels store lawn and garden tools neatly off the floor. Even the heavier tools are hung on these easily painted panels.

Don't miss the demonstration at the Coliseum. See the modern techniques used to build the Research House.

and

Visit Masonite's exhibit, Booths 30 and 31, at the NAHB Show in the Conrad Hilton Jan. 18-22



Masonite Corporation—manufacturer of quality panel products.

Is 1959's problem the sales market, or saving VA from strangling?

Housing has apparently already experienced all, or most, of the recovery it is going to show for a while.

That doesn't mean this year looms as a disappointment. Far from it. Seldom have so many experts agreed on precisely the same forecast for a year's nonfarm starts: 1.2 million. Among them: HOUSE & HOME's Miles Colean, the Commerce & Labor Depts, the Federal Reserve, such economists as Sumner Slichter and Saul Samuelson, Gypsum Tycoon Melvin Baker—the list goes on and on.

Last year's recovery, fueled greatly by the \$1 billion of Fanny May special assistance mortgages at subsidized prices, was both sharp and dramatic. The annual rate of private starts bounced up 45% between February and November (from 915,000 to 1,330,000).

Now the nagging question is: can housing hold the 1.2 million rate all year?

Builders are taking the party line that sustaining that much private housing will require fresh financial aid from Congress. Their main worry is VA, which is again sliding toward extinction because its politically-frozen interest rate means discounts so big lenders don't want to lend and builders fear operations will be profitless. Congress seems unlikely to boost VA's 4¾% interest ceiling. But it may well pump more Treasury money into Fanny May for subsidized mortgage buying—barring a Presidential veto. "It is hard to see more than 1 million private starts without new legislation to open up VA," forecasts Economist Charles Young of Weyerhaeuser.

Has all the talk of running to Washington for easier or more plentiful money overlooked the biggest market facts of all?

The facts: 1) new housing is a postponable consumer expenditure, 2) perhaps half of the potential market for new homes are families locked into their existing houses for lack of easy trade-in arrangements and 3) vacancies are becoming a problem in some cities.

Warns Market Analyst James C. Downs of Chicago: "The problem of housing in 1959 will not be money, but markets. The market expansion in urban centers has slowed down because of the recession, and employment is still below previous peaks. Vacancies are higher than they have been since 1942."

Agrees Economist-Treasurer Walter Hoadley of Armstrong Cork: "It's going to be tough to get housing above the level you have now. Vacancies are going higher."

Nearly a third of the nation's vacancies, the national housing inventory found, are substandard dwellings (many of them, apparently, on farms). But new rental projects in some cities are experiencing 6, 8 and 12% vacancies, which are bound to dampen single-family house construction.

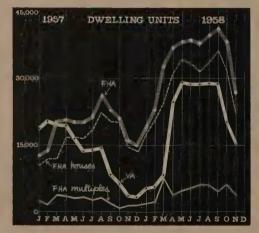
Sums up a top Federal Reserve spokesman: "The areas in question for 1959 are housing and automobiles. In autos, it is simply a question of whether people are interested. In housing, the cost of money will not be a controlling factor."

Even so, private starts can hardly shrink below 1.1 million. And 1.2 million total starts is a good bet.



HOUSING STARTS are at their highest level in 3½ years. Private starts, seasonally adjusted, reached an annual rate of 1,330,000 in November—highest since 1,372,000 registered in June 1955.

November starts totalled 102,000 units (100,-000 private, 2,000 public). For 11 months, private starts (1,038,200) are 11.6% above '57.



FHA AND VA APPLICATIONS. FHA applications on new homes dropped to 22,320 in November, 29.8% below October but 72.1% above Nov '57 and the highest November figure since since 1954's 26,851.

VA appraisal requests fell for the third month in a row. The total of 15,321, was 19.7% behind October but 308.8% ahead of Nov '57.

MARKET BRIEFS

Builders' own forecasts

Housing starts will be up about 5% this year if there is enough mortgage money to keep VA going.

This is a double-barreled NAHB forecast. It's the concensus of 37 leading builders who spent most of Dec 9 in Washington giving the word to 24 Administration and Congressional housing aides. It's also the finding of NAHB Economist Nat Rogg's latest survey of 300 builders.

Past NAHB President Dick Hughes, one of the 37, cautioned: "This projected increase cannot be attained on the conventional and FHA programs alone . . . Steps must be taken to make VA effective." Chorused Gene Vescovo of St Louis: "We need VA. We can't maintain volume without it."

More builders than ever spoke of increasing trouble finding land they can use, because localities are putting up zoning barriers. The panel agreed costs will shoot up about 5% this year, led by land and labor costs. Cried George Vadnais of Springfield, Mass: "We have a higher cost now in most operations than people are willing to buy."

In Rogg's survey, half of the 300 reporting builders look for more homes this year than last. Another 40% expect starts to stay the same. But for their own operations, the same 300, who starter 24,100 units in 1958, expected to start almost 40% more this year (32,200). But Rogg says 43% of them say their own plans hinge at least partly on what Congress does, especially about VA interest and FNMA mortgage money. On costs, 83% expect higher labor prices, 81% expect to pay more for land.

Builder fined for selling houses

A stubborn Milwaukee builder has lost the first round in his fight to sell his own houses without a real estate broker's license.

Arthur Buch, who builds in suburban Cedarburg, was found guilty of 14 counts of violating the Wisconsin broker's law. Judge Peter M. Huiras, who tried the test case without a jury, could have sent Buch to jail for up to six months and fined him \$10,000 on each count. Instead, he imposed a token \$25 fine.

Ruled the judge: "Although the court agrees... that defendant was not wholly engaged in the sale of real estate, it must be conceded that he was engaged in part in the business of selling real estate, such real estate being owned by himself. To hold otherwise would be doing violence to the plain wording of the statute..."

Buch says he will appeal to the Wisconsin Supreme Court. The verdict is also stirring builders to ask the legislature to amend the broker's law to let them sell their houses without passing a broker's exam and getting a license.

Housing starts go to Census

When Census Bureau takes over the job of counting housing starts from BLS in about six months—it will have more money to do the job, if Congress agrees.

The Budget Bureau finally worked out a settlement to the long-standing Commerce Dept-BLS feud over construction statistics last month. Census, a division of Commerce, gets

continued on p 49

What leading builders are planning for 1959

For the third year in a row, House & Home has asked the same panel of leading builders across the nation the same question: how many houses are you planning to build this year—and why? Results:

• Nearly half of them (45%) plan to build more homes this year than last. This prophecy dovetails with many others—from economists, the government, other

House Home exclusive surveys. So it reinforces forecasts that 1959 will turn into housing's best year since 1955. Of the panel, 35% expect to start the same number of homes this year as last. Only 5% plan fewer. And 15% shy away from definite predictions (last year 22% were too uncertain to predict).

• Nearly a quarter of these "builders other builders follow" (23%) have decided to move up to a more expensive price bracket. Most of them hope to give customers a much better house for only a little more money. Only 15% will switch to

smaller and cheaper units. As usual, a majority (61%) plan to stay with the same size house at about the same price.

Last year was a good year for this blue ribbon group.

Queried a year ago when mortgage money was just beginning to thaw after its 1956-57 freeze, they were pessimistic about 1958. But results show 59% of them started more homes than they expected last year (not counting Capeharts which statisticians consider public housing). Only 24% built fewer and 18% did about what they forecast.

Cumulatively the builders started 9,615 houses last year, 1.4% more than the 9,582 planned. (In 1957 they started 9,459; 17% less than they had estimated a year earlier.) Most common reasons for doing better than expected: the anti-recession housing act and easier money.



Hutchinson Construction Co of Denver started 510 houses in 1958—just 10 more than expected. The firm hopes for 750 starts in

General Manager Ed Northway hedges his 1959 outlook: "We might be held to 350 starts if Congress doesn't pass some helpful legislation and relax the VA interest rate."

If Hutchinson gets the legislation and the rate adjustment, it will widen its price range from \$12,950-\$17,950 to \$14,000-\$20,000. "We want to get a larger percentage of the available market," Northway explains.

Herbert & Holden



Chris McKeon of San Francisco had 740 starts in 1958 vs the 700 expected. He is aiming for 800 this year.

McKeon completed to

McKeon completed tracts in San Jose and San Francisco last year, is now building only on his 3,000-lot Daly City tract—one-third finished. Now seven months behind sales, he is discouraging some buyers, so he won't fall further behind.

McKeon would start more units except

that grading requires moving 10.5 million yards of earth—limiting him to four starts a day. Homes are three- and four-bedrooms in the \$18,000 price range.



Burnside Construction Co of Chicago planned 250 houses in 1958, started just that. The firm hopes to equal that record in 1959.

President George Arquilla Sr will stay in the \$17,000 to \$24,000 price range. Only more tightening of the mortgage market would disrupt his plans, he predicts.



Fox & Jacobs of Dallas planned 200 houses for 1958, built about that many. They plan 600 or more in 1959.

Says Partner David G. Fox: "The year ahead will be the best we've ever had. We've already sold 600 units we haven't started." All but 80 or 90 of the units will be in a \$14,000 to \$18,000 tract. The rest will be priced around \$27,000.

Mackle Co of Miami hoped to start 3,000 houses in 1958, did hit 2,504. The firm plans 3,500 in 1959.



Partner Frank Mackle expects most 1959 production to be at the company's huge Port Charlotte tract on the west coast and its new Port St Lucie development on the east coast. Mackle has only 235 lots left in its 3,000-home Miami project started in 1955. The company now has seven tracts going in Florida. Prices range from \$6,900 to \$19,200.

Fabian Bachrach



Joseph Meyerhoff of Baltimore expected to start 500 units in 1958, actually built 550. He expects to start 500 to 600 this year.

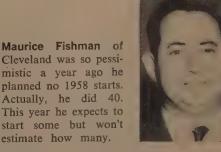
"We plan to keep on doing what we've been doing," he explains. His houses are priced from \$12,000 to \$22,000. "We've got a problem with land and labor costs. If they continue up we'll have to raise prices."



Leo Rush of Portland, Ore., hoped to start 50 homes in 1958, actually started none. But he plans 200 in 1959.

Rush found the market too slow for the \$25,000 houses he was building, spent 1958 selling his 1957 inventory and lots in his tract to other builders. This year he will move back to the \$12,500 to \$15,000 price range.

Oscar & Associate



His 1958, performance was better than expected Fishman explains because "sales in late spring got brisk. We were able to unload

continued on p 45



fun appeal

ADDS SALES APPEAL

The family or recreation room becomes a complete hospitality center when you plan to include a Dwyer Snack Bar. Choose from several models, ranging from a handsome refrigerated beverage bar, to a full compact kitchen complete with refrigerator, range, sink and storage. Each is designed for fast, economical installation.

Which of these fun centers fits your plans?



DWYER SNACK BAR

Richly paneled in your choice of several fine woods,
or in unfinished fir for custom decorating
on the job, the Snack Bar comes complete with big refrigerator,
freezer, deep sink, rangetop and oven (both optional),
plus storage cabinet. There's also a lock-up beverage

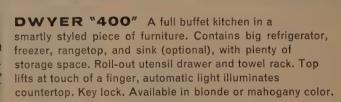
keeper and a utensil drawer with sandwich board. Available in sizes from 57" to 89" in length, each with stain and mar-resistant top.

MAÍTRE "D"

In sleek ebony set off against gold-colored aluminum trim, the Maître "D" opens at the touch of a button to provide at-hand refreshments and light snacks. Five-plus cubic

foot refrigerator has convenient roll-out shelves and freezer that can hold nine ice cube trays. Lock-up beverage keeper, utensil drawer with cutting board and towel rack. Plugs into 110 AC outlet.







wyer Mic

PRODUCTS CORPORATION
Michigan City, J 1501, Indiana

Gentlemen: Please send complete information on:

SNACK BARS_____ MAITRE "D"____ DWYER "400"_

MY NAME

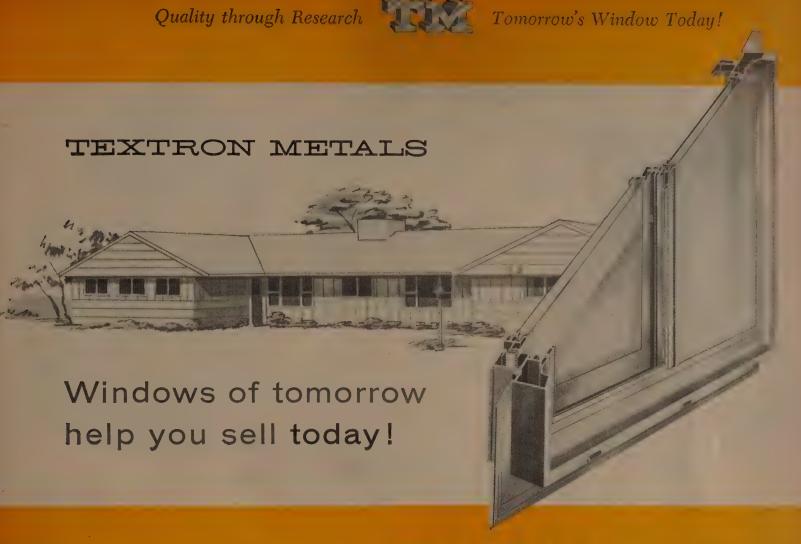
COMPANY NAME

ADDRESS

CITY, STATE

Also send information on full line of conventional compact kitchens.





TEXTRON METALS Sells them all...



DOUBLE HUNG







SLIDING DOORS

AWNING



JALOUSIE



JALOUSIE DOORS



DOUBLE GLAZING

A feature that adds the premium touch to every home. Here is the economical, practical way to create window insulating efficiency. Textron Metals removable, insulating sash is an optional feature that helps eliminate drafts, increases overall home insulation.



INSULATED FRAMES

Frame sections are uniquely designed in two sections causing a break in thermal conductivity. The insulation factor is tremendously increased, and bothersome problem of condensation reduced to a minimum.

Last year with the introduction of Textron Metals "Windows of Tomorrow" builders throughout the nation became aware of an exciting new concept in window design. And now with an even more exciting 1959 version Textron Metals residential windows are attracting more acclaim from America's leading builders. Impressive in design, yet priced right, this TM "Window of Tomorrow" provides all the wonderful qualitites of long lasting, no-maintenance aluminum plus the most advanced unique window features in years. With TM's aluminum windows you can be sure of year-to-year technical advances in window engineering because of Textron Metals vast research facilities. TM also gives you more experience from design to assembly and a nationwide network of plants and warehouses to service you better.

Textron Metals "Windows of Tomorrow" are available in both single and double glazed models. The complete TM line includes sliders, single hung, double hung, awning-type and jalousie windows—also a newly designed glass sliding door and a jalousie door. See Sweet's . . , or write for literature.



A Textron Industry

TEXTRON METALS Company

TM ALUMINUM SIDING: Offers exciting new dimension and dependability for today's homes,



fabulous FOODARAMA for the kitchens that win women's hearts

A 12 CU. FT. DELUXE REFRIGERATOR AND A 6 CU. FT. UPRIGHT FREEZER ALL IN ONE CABINET ONLY 41" WIDE, 63" HIGH AND 25" DEEP

Imagine the woman-appeal of offering both a deluxe refrigerator and an upright freezer in your kitchen! It's easy with the Fabulous FOODARAMA! Women fall in love with its striking beauty and convenience the moment they see it.

How do we know?

Because we asked hundreds who have one. Their answers added up to just one thing: women find FOODARAMA almost irresistible! And there's nothing else like it!

Smart builders will be the first to offer it—either built-in or free-standing—in their areas.

See America's Most Admired, Most Desired Home Appliance At The

CHICAGO BUILDERS' SHOW

January 18 through 22, Booth #1, Conrad Hilton Hotel

Plus Kelvinator's New Line of Built-In Ovens and Surface Units, Electric Ranges, Washers, Dryers, Dishwashers.

fabulous FOODARAMA

by Kelvinator

Division of American Motors Corporation • Detroit 32, Michigan

American Motors

More for American

Live Better Electrically

WITH FOODARAMA IT'S LOVE AT FIRST SIGHT

"We really didn't have a reason for buying our Foodarama. We saw it in the newspaper and thought we would stop by and look at it. After we saw it, we fell in love with it, and bought it."

—Montgomery, Ala.

"I looked at the Foodarama twice and bought."
---Perry, Florida

"When I saw it, I knew I wanted one."

—Golden Meadow, Ia.

"My wife remarked that 'there is the refrigerator I want when we buy one,' when she saw it demonstrated on TV for the first time. She is even more enthusiastic since she has used it for a year."

—Tuscaloosa, Ala.

"We loved it on sight."
—Pasadena, Calif.

MAIL THIS COUPON TODAY!

KELVINATOR DIVISION 14250 Plymouth Road Detroit 32, Michigan

Please send complete details of the Special Foodarama Builder Plan

Name____

Company

City_____State____

Big builders Lively, Woodrow aim to be bigger in 59

continued from p 41

a number of old homes for people and sell them new houses." As for 1959, he says: "We'll build as we'll sell. Where that will lead us I don't know. We haven't sold a house now in two months."

H&H staff



Carl Mitnick of Merchantville, N.J., planned 350-375 houses in 1958, actually did better with 420. He hopes for another 420 in 1959.

He credits his better-than-expected 1958 record to "the emergency Housing Act and the fact we went into lower priced houses this year." He had been building houses priced from \$8,000 to \$17,000—scaled it down last year to \$8,000 to \$14,000. He'll stay in that price range this year.

El Greco



Walter L. Tally of Atlanta hoped to build 50 units last year, actually started 60. He plans to step up this year to 130 or 140.

Tally will finish one tract of \$16,000 to \$19,000 houses—40 or 50 units—then start a 90-house tract priced from \$20,000 to \$30,-000. He says: "The higher price is the market to shoot for. Everybody else is building in the middle range. There's only one way to go and that's up."

Ekson Alexandre



Diller-Kalsman of Los Angeles had hoped for at least 500 starts last year - perhaps even 1,200. They started only 450, hope for more in '59 but have no specific

Richard Diller had to cut back plans when he ran into difficulty getting a new 2,000-lot tract annexed to the City of Los Angeles. He finally got it in but must still get subdivision approval.

In any case, he will drop his price range from last year's \$16,000-\$22,000 to \$15,000-\$18,000 in 1959, staying with traditional California style.

Laughead



Centex Construction Co, of Dallas, 1957's biggest home builder, planned 2,000 units actually started 2,261 plus 715 military housing units. The firm hopes to build 3,000 in 1959, excluding military units.

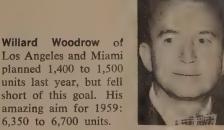
President Tom Lively is a little disappointed with 1958 production. He says he could have done better in Dallas if he had been able to get his operation regeared faster to take advantage of the anti-recession Housing Act. "Our price range (in Dallas) was about \$13,500," he explains. "We found demand was greater for a home that sold for about

Most of Centex' 1958 starts were in Chicago. The firm also started 200 units in Honolulu last year.



Morrison Bros of Omaha started 20 homes in 1958, just missing the 22 planned. They plan 30 to 36 in 1959.

Bob Morrison says he and his brother would have had an even better 1958 record but for a heavy volume of contract homebuilding. "This custom building ties you down too much," he adds. "It's not going to happen again. There is too much wasted time and effort." He will stay in the \$26,000 to \$55,000 bracket.



Los Angeles and Miami planned 1,400 to 1,500 units last year, but fell short of this goal. His amazing aim for 1959: 6,350 to 6,700 units.

Woodrow will start only 200 houses this year in the Los Angeles area. He explains: "The market is pretty well saturated and there's a lot of competition."

In 1959, he hopes to build on 2,000 of the 3,000 lots he has in Carol City near Miami-all in the \$15,000 range. He expects to build 150 to 200 high-priced homes on Key Biscayne near Miami, 2,500 low-priced retirement homes (\$9,000 and under) at an unnamed Florida location and 1,500 to 1,800 homes in Waldorf, Md., 26 mi from Washington (priced around \$14,000).

LOCAL MARKETS:

Sales soar in Phoenix and Seattle, slide in Detroit

Phoenix: Builders had a record-breaking year in 1959. With November and December figures still to be tabulated, Maricopa County showed 10-month starts of 10,725-more than the 10,404 record set in all of 1957:

> 1958 10 Months 10 Months Year

1-family houses Multiples 2,559 1.974

Phoenix's continuing boom is based on swelling population (up from 450,000 in 1955 to an estimated 560,000 on Jan 1).

Big Builder John Long stepped up his production again last year, reaching 2,500 (vs 1957's 1,787). He thus remains the giant of the industry in Arizona. He plans 3,000 units this year.

Los Angeles: Market prices of existing singlefamily homes continue a steady rise in price. They are up 3% from a year ago, up 23% from spring 1954 and up 42% from 1950. Rising land values are among the biggest causes. A home that sold for \$5,000 in 1940 would now sell for about \$16,200, according to the Residential Research Committee of Southern California.

Louisville: Subdividers have come out of their recession hibernation and are planning three times as many projects as they did a year ago: 43 in the first 11 months last year.

Detroit: Housing starts plummeted to about 21,000 last year, lowest since 1947 and a drop of 47% from the last boom year of 1955. Auto unemployment was the big reason for Detroit's slump. And even though automen view the prospects for 1959 with guarded optimism, the employment outlook in autos is not bright. Fewer workers are producing more cars. UAW says some 637,-000 hourly auto production workers turned

out 579,000 units in November 1957. Last November, 490,000 workers produced about 500,000 cars, probably added another 590,-000 in December.

This kind of increased efficiency is a normal product of recessions. The last one seems to have been no exception. But it may well mean a slowdown in Detroit's housing pace until the basic situation changes.

Seattle area starts topped 17,000, contrasted with just over 12,000 during 1957. One cause was a new and tougher zoning code which produced a rash of new apartments to beat its effective date. But the general tone of Pacific Northwest business is still tied to the lumber industry. How it fares (badly for the last two years) depends on housing nationally. Says Weyerhaeuser Economist Charles Young: "We are looking for a better year in 1959."

continued on p 49

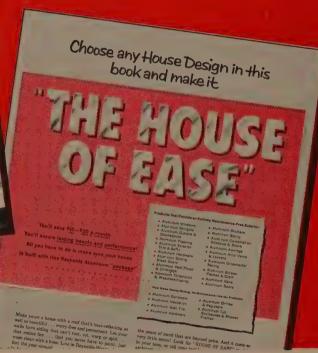
TESTED...PROVED...NOW WATCH IT GO!

PRINTED IN FULL COLOR ON ALUMINUM FOIL!

"The House of Ease" will use the first foil Insert

NEW HOMES GUIDE . TODAY'S HOME HOUSE BEAUTIFUL'S BOOK OF BUILDING HOUSE AND GARDEN'S BOOK OF BUILDING

...reaching more than 1,050,000 people who are immediate and positive prospects for new homes! a great, field-proved assembly of sales helpsincluding working displays for model homes.





Reynolds Aluminum Exterior

Cots Costly Upkeep in

THE HOUSE

OF EASE"

Big Sovings!

Behind all this Permanent Beauty.

REYNOLDS 24 ALUMINUM

FEATURED BIG ON BIG NATIONAL NETWORK TVI

On "WALT DISNEY PRESENTS ... ", Fridays 8-9 PM, EST, Reynolds brings America two great new series-"The Nine Lives of Elfego Baca" and "The Saga of Texas John Slaughter". On "ALL-STAR GOLF", Saturdays 5-6 PM, Reynolds brings to the sports world thrilling matches by the top names of the game. Watch the "HOUSE OF EASE" shine on these great programs!



Watch Reynolds' New TV Shows "Walt Disney Presents" and "All Star Golf" Every Week on ABC-TV.



ROVED success! Wherever the "HOUSE OF EASE" has been shown, it has outsold comparable houses ... and boosted the builder's total sales! The "HOUSE OF EASE" is preferred 7 to 3... that's the average experience in Boston, Wilmington, Detroit, Chicago, St. Louis. And in housing as in all progressive industry, light yet strong aluminum has proved itself a labor-saver. Given one fair trial it wins the workers' support! Note another big advantage, too ... variety. The "HOUSE OF EASE" is any home, any design . . . so long as it has the Reynolds Aluminum package. And that package is infinitely variable . . . in textures and colors of roof and walls, in horizontal or vertical siding lines, in modern treatments of gutters, eaves and soffits. So give the people what they want... permanent beauty, savings of \$10 to \$20 a month on maintenance, heating, air-conditioning, better protection for their investment, higher re-sale value. Remember, they can afford your better homes with the money they save month after month in the "HOUSE OF EASE". Get the facts! Call any Reynolds sales office or write to Reynolds Metals Company, Richmond 18, Va.

Remember, you've got a Star Salesman in REYNOLDS WRAP...greatest home demonstrator of aluminum . . . standard-bearer of the Reynolds name! FOIL & Reynolds Wrap

Consumer folder tells the story . . . just one of the sales tools supplied free to builders in the "HOUSE OF EASE" program.

Here's the Complete Package that Transforms any Home-Design into a "HOUSE OF EASE". All Items made by Leading Manufacturers using

REYNOLDS ALUMINUM

Products that Provide an Entirely Maintenance-Free Exterior:

- Aluminum Windows
- Aluminum Shingles
- Aluminum Gutters & Downspouts
- · Aluminum Flashing
- Aluminum Exterior Trim & Soffit
- Aluminum Hardware
- Aluminum Sliding Glass Doors
- Aluminum Vent Flues & Chimneys
- Aluminum Thresholds & Weatherstripping

- Aluminum Shutters
- Aluminum Siding
- Aluminum Combination Windows & Doors.
- Aluminum Awnings
- Aluminum Attic Vents & Louvers
- Aluminum Ornamental Railing
- Aluminum Screen Frames & Cloth
- Aluminum Nails
- Aluminum Doors

Plus these Money-Saving, No-Maintenance Interior Products:

- Aluminum Ductwork
- Aluminum Insulation
- Aluminum Wall Tile
- Aluminum Hardware
- Aluminum Grilles & Registers
- Aluminum Tub Enclosures & Shower Frames

Emblems like this on more and more products all promote the "HOUSE OF EASE"

made with REYNOLDS (SE) ALUMINUM as featured in the HOUSE OF EASE

See us in Booth 215-216, Conrad Hilton, NAHB Convention.



ROANOKE PARK, a 96-unit garden apartment project in Kansas City, Mo., is being occupied as quickly as buildings are completed. Big attraction has been an individual tenant-controlled

American Standard furnace in each apartment. Heating contractor Sam Rapschutz of Quality Furnace Co. estimates that heating costs per tenant will average only \$45.\$50 a season.

Read what developer-builder Howard W. Swan says:

"We're really sold on individual

apartment furnaces...and so are our tenants"

Howard Swan, a man who's been in the construction business for 35 years, is a strong booster for separate, tenant-controlled furnaces in every apartment of a development. He installed 200 furnaces in one project a year ago . . . and his latest development, Roanoke Park garden apartments, will contain 96 American-Standard furnaces.

He gives many reasons for preferring individual heating units. As a builder, he doesn't have to put in complex piping or ductwork, or sacrifice basement space for heating equipment. As a landlord, he can completely forget about heating costs, since each tenant pays for his own fuel. And, of course, there's no such thing as a tenant complaining, "There's not enough heat." (No more worries, either, about the possibility of a single breakdown that would leave

the entire building without heat.) "Naturally, we're price-conscious, and we think individual furnaces are more economical than central heating," says Howard Swan. "And, in this case, we're also pleasing our tenants."

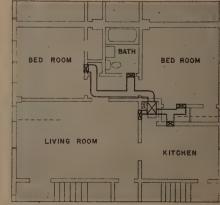
Why did Howard Swan select American-Standard? Simple—he wanted a top-quality warm-air heating unit at a competitive price, and American-Standard filled the bill on both counts.

Your American-Standard warm-air dealer will be glad to tell you more about the advantages of individual-apartment warm-air heating units. He's listed in the Yellow Pages under "Furnaces."

American-Standard, Air Conditioning Division, 40 West 40th Street, New York 18, New York.



Two-man team installs complete unit and ducts in six to eight hours. This gas-fired American-Standard furnace—the G.U.B. 750—delivers 75,000 B.T.U., requires an area only three feet square. Entire unit is easily accessible for adjustment.



Plan of two-bedroom apartment shows warm a registers in bedroom, living room, kitchen and bath Thermostatis located in living room. Ductwork, built int wall space between rooms and corridors, is roughed a before placturer arrive.



The booming Boeing aircraft plant is smoothing sales for most builders. Bell & Valdez had a \$6.8 million year contrasted with \$4.5 million in 1957. Builder Herman Sarkowsky, in neighboring Tacoma, reports sales up 15 to 20% over last year for himself, says other builders "are not hurting."

Sacramento is experiencing a major boom. Starts last year went over 6,000, more than double 1957. About the same pace is expected this year. Major backstop for housing space is fast-growing Aerojet-General Corp's missile production. Employment has soared above 11,000, could double in two more years. Rentals are hard to find.

Past NAHB President Dave Bohannon will start a 6,000-home development there in March—his biggest yet, he thinks. He will begin with 300 homes (\$16,000-\$18,000 bracket), hopes to expand to 800 to 1,000-a-year by 1960. Bohannon, who has built more than 12,000 homes since 1925, expects to take five years to complete this project. He paid nearly \$4 million for its 15,000 acres. Architect is Mogens Mogenson, engineer Joe Spink, planner Ronald Campbell.

Omaha: 1958 is due to be the third best in the area's home building history. Comparisons through the first 11 months show:

Year	Starts	Year :	Starts
1958	2,663	1955	3,753
1957		1951	

About 80% of new houses are priced under \$20,000. A survey of eight builders putting 630 homes in place showed average cost is \$15,630, and that all buyers of 200 houses priced below \$10,000 were under 35.

Portland, Ore.: Land prices continue to soar. Builders Cooley-Walsborn have just paid \$5,000 an acre for undeveloped property 8 mi from downtown. It was offered for \$3,200 an acre only two years ago. Up to now, top residential acreage has been running around \$4,200 to \$4,500, with quite a bit available as low as \$3,500. The \$5,000-an-acre land is among \$12,500 to \$18,500 homes.

Long Island: Home building enjoyed a healthy 15% increase over 1957, based on 11-month totals. Builders are talking up sales by warning that this year's homes are likely to cost 5% more—for the same house.

Milwaukee: New apartment construction is still brisk in spite of soaring vacancies that are giving some landlords much trouble. FHA says its Wisconsin and Milwaukee apartment vacancies doubled from June to November (2.7% to 5.47%). In the Milwaukee area alone, the 6.1% vacancy was more than double what it was six months earlier. But construction of new units was running 18.7% over the same period in 1957. Unworried builders and brokers call the vacancy problem spotty, concentrated in a few overbuilt areas and say it mainly affects older, overpriced units. But the owner of one big new project reports nearly 30% vacancy after several months of promotion.

Milwaukee builders report house starts are still running behind '57.

Chicago: Campanella Bros, big Boston home builders, have followed the lead of five other big builders and moved into Chicago. The firm plans 4,000 homes northwest of the city in Schaumberg Twp. It will start with 500, priced from \$14,000 to \$18,000. Campanella Bros are also participating in a new mass housing development west of West Palm Beach, Fla.

MARKET BRIEFS

continued from p 40

all building statistics work—including the heavy construction figures now gathered in Commerce's Construction Industry Division. BLS takes over all employment and unemployment statistics, including Census! labor force statistics.

The Budget Bureau has approved a \$1 million request for Census' new building statistics work. This is \$370,000 more than appropriated for BLS' and Commerce's building statistics work combined in fiscal 1959.

Part of the extra money would be used to improve the accuracy of housing starts figures, which the National Housing Inventory suggests may be as much as 25% wrong. Part would go for a new series on repair and maintenance outlays—a multi-billion dollar area where experts agree there is no reliable data at all.

Why people buy

Easier financing, not style or newness, gives tract homes in the San Jose area an edge over older houses. And nearly half of buyers fail to find what they most want in a new home—enough space.

These facts emerge from a study of 300 families who bought houses built in 1956 and '57 around San Jose conducted by the real estate department of San Jose State College.

The study (which covered 10% of the new housing involved) pictures the typical tract home buyer as nearing 35, probably with two or more children and making about \$8,000 at some kind of professional, technical, managerial or skilled job. He probably considers himself well qualified to choose a house, is unlikely to consult an expert. In finding his new home, he goes into an average of 16 houses, looks at nine more from the outside. He is more likely to find the house he buys by driving around or hearing about it than reading newspaper advertisements, will visit two houses more than once, seriously consider two before deciding. The decision will usually be based on price, but appearance is important as is transportation to work. Average price: \$16,000.

Two out of three buyers seriously consider buying an old house, or building a new one before finally buying a tract house, the survey shows. And 44% said easier financing lured them from an old house.

More space was the first want of 40% of the buyers. Enough space was what 45% of them felt they did not get.



COASTAL'S FIRST FRAME HOME WAS BUILT IN WEST PALM BEACH

Florida town forbids frame house construction

An effort to establish frame house construction in south Florida—where concrete block has long reigned supreme—has hit a snag.

The small town of Lake Park (pop., 2,000) north of West Palm Beach, has passed an emergency ordinance banning use of wood on the outside walls of any new or repaired home. The ordinance says it is aimed at "substandard housing." Its practical effect has been to block construction of a new component frame home, prototype for a proposed tract

The component homes were designed by John Stetson of Palm Beach, president of the Florida Assn of Architects. They are being built by Coastal Properties Corp, headed by Elmer Hedrick, immediate past president of the Florida Assn of Home Builders (June '58, News).

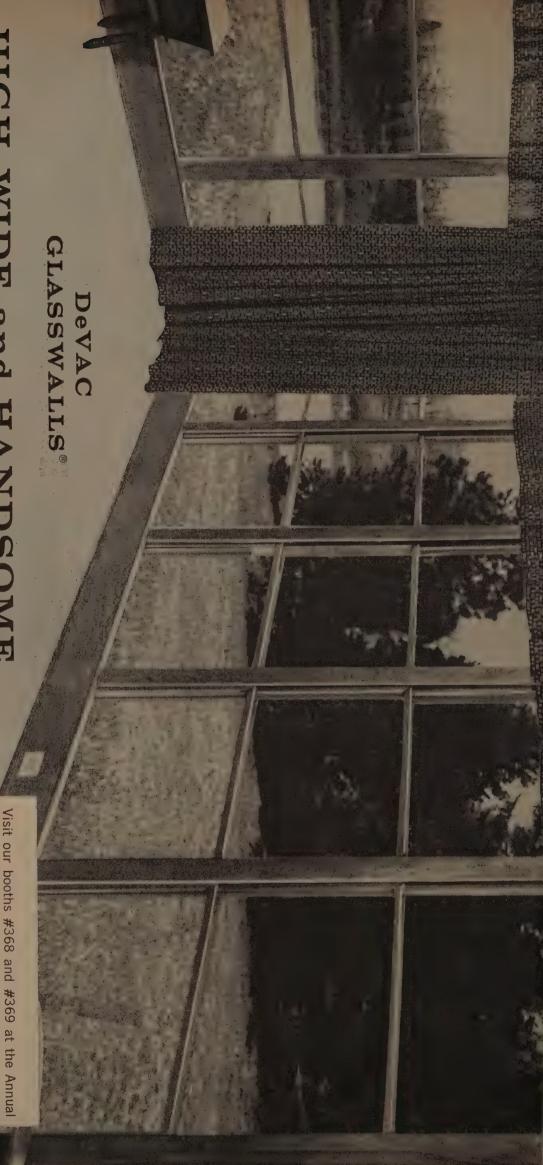
Hedrick, who is producing the component homes in a West Palm Beach plant, contends his method cuts labor costs on a finished home by 60%, even though he uses union labor. The homes are designed on a 4' module allowing unlimited variations in component composition. Wiring and plumbing are put in place at the factory.

Coastal built several homes itself to demonstrate what can be done with the components. FHA and VA approved them. So

have building officials in Palm Beach and West Palm Beach. Even Miami builders are interested—if they can be convinced of the market acceptability of frame.

But Lake Park Building Inspector Harry C. Brown, calls the component house "flimsy." He particularly objects to the treated, termiteproof plywood panels used on the exterior. And he convinced the town commission he was right. Retorted Architect Stetson, in a "congratulatory" letter to the commission: "To my knowledge, man's history can show no other political entity capable of depriving man of the use of the most common building material ever devised . . . for a building . . . We can foresee many joyous citizens rallying to your cause . . . I trust that all present and future citizens of your town are so wealthy they will not require a cheap exterior treatment but can face all buildings with long lasting materials such as marble, granite and brick. With all-wood residential construction comprising 90% of all homes in the United States . . . it is refreshing to find five men who seek to turn the tide in favor of other materials."

In mid-December, the Lake Park commission agreed to talk the matter over again with Coastal and a representative of the lumber industry.



HIGH, WIDE and HANDSOME

Your new home and remodeling prospects will be sold on DeVAC GlassWalls at first sight. The clean, modern lines of these porch enclosures frame a wide-angle, floor-to-ceiling view of all outdoors. Weather-tight in winter, wide-open in summer, they provide the kind of versatile living space everyone wants today. The three sliding glass panels that raise and lower

independently are an exclusive, sales-clinching DeVAC feature.

BUILDERS SHOW—Conrad Hilton Hotel, Chicago

(A few distributorships still available)

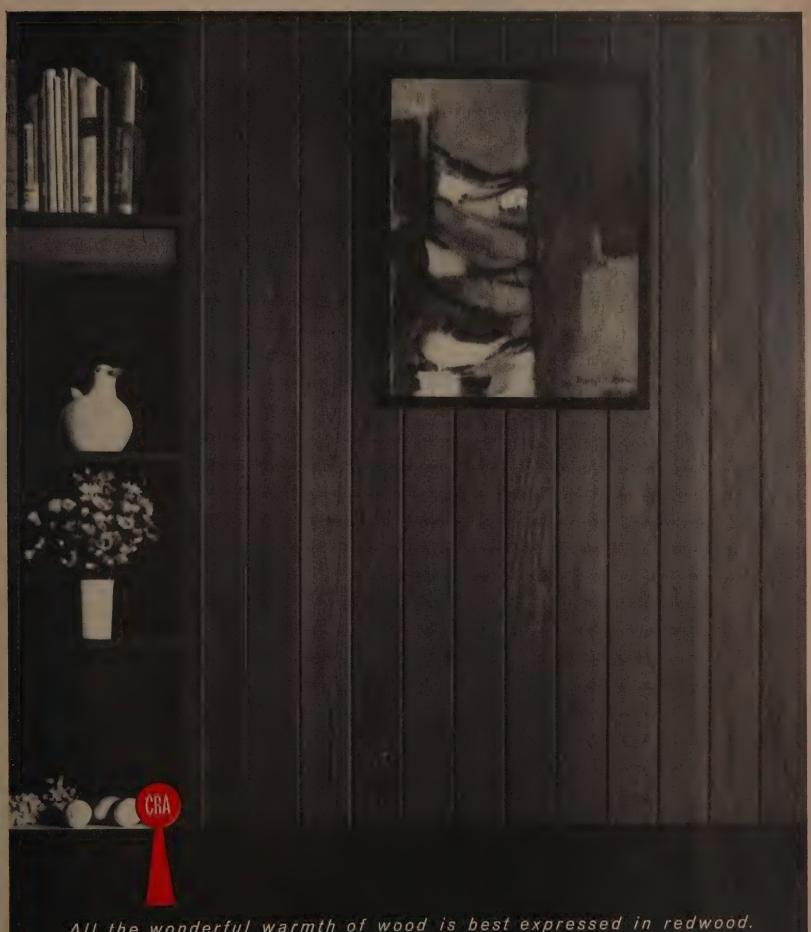
DeVAC offers you a product with a proven appeal in both the new construction and remodeling markets, and backs your selling efforts with an all-out program of consumer advertising. Sell complete porches, or convert porches and breezeways. Every homeowner is a prospect!

DeVAC Glass Walls: Extruded from high-grade heavy-duty aluminum, precision engineered for trouble-free performance and length Fiberglas screens. Send coupon

for complete specifications and application details.



PERFECT BACKGROUND for beauty...and so beautiful in itself...that's why architect and designer choose California redwood for interior walls. And that's why they specify CRA Certified Kiln Dried Redwood.



All the wonderful warmth of wood is best expressed in redwood.

CALIFORNIA REDWOOD ASSOCIATION . 516 SACRAMENTO STREET . SAN FRANCISCO 11. CALIFORNIA

Opinions

Noteworthy comment on matters of moment to housing:



Chairman Melvin H. Baker of National Gypsum. in a talk to NRLDA;

"The American consumer has grown tired of the same old thing. He has seen the beginning of the space age and submarines that travel under the north pole. Such deeds—have developed a new awareness of science and technology. Because of this, it seems to me the public is looking for something new in home construction . . . Our industry has been trying to sell our production rather than trying to find out what the consumer wants and then producing it."



NAREB President H. Walter Graves, to his New Jersey association:

"In no area is the demand for higher standards more apparent than in the demand for homes and home environment."



Builder Paul Tishman of New York City:

"I am convinced that suburban developments are our future slums. They have mush-roomed without adequate planning for schools, sewers and other public facilities and their traffic problems are getting as bad as those in the big cities."

Knox Banner, past president (1957) of Natl Assn of Housing & Redevelopment Officials:



"These fanatics opposed to public housing can't understand that all we want them to do is build an adequate supply of housing."



Catherine Bauer Wurster, lecturer on city and regional planning, in a speech on public housing problems:

"I am not at all convinced that the present federal officials are any worse than federal officials have ever been. Federal bureaucracy is federal bureaucracy. I doubt that pressure from local authorities alone will ever cure [the situation]. They are too dependent on federal largesse."

HOUSING POLICY:

Can FHA loans for land development ease woes of scattered subdivisions?

Ever since the postwar housing boom used up the nation's Depression surplus of developed building sites,* builders have struggled with more and more land development problems. Prices of raw acreage have soared so fast that developers, leapfrogging speculators, press further and further into the countryside in search of tracts cheap enough for lowpriced homes that can sell on low-down terms. Exurban towns, staggered by the prospect of costly expansion of schools and community facilities, rear up zoning and other artificial barriers to the housing of the exploding US population. Freeways, planned not by planners but by highway technicians. carry more and more commuters into the resulting suburban sprawl.

Same old mistakes

"Suburban sprawl," HHFAdministrator Albert M. Cole said recently, "means we are on the way to creating a septic tank suburbia, repeating in principle the mistakes we permitted in our cities and which we are spending billions to correct. Because our cities grew planlessly, people have been beating it out to the country. At least it used to be country. In many, if not most cases, there isn't a plan, or what plans there are aren't being implemented in relation to the whole. The cost of straightening out this mess is going to be enormous."

These ideas are catching on.

"Something drastic," an urban renewal official said last month, needs to be done to cut down such vast subdivision scatteration. Whether it is a new kind of control over land development or a new means of providing sewers and other utilities, Atlanta's Bruce Wedge told a home builders meeting, it must come soon. Otherwise, every middle-sized and large US city soon will face trouble and be unable to pay its bills. "So long as people get scattered all over the countryside, the cost of furnishing them with roads, utilities, schools and services is going to keep going up," he warned.

FHA to the rescue?

One effort to do something about this Gordian problem was started last month by FHA. Commissioner Norman P. Mason convened a 15-man advisory committee to study whether FHA should ask Congress let it insure loans for land development.

Conferees were unanimously in favor of the idea, several of them told House & Home. Some disagreement developed, however, over whether such loans should be limited to complete neighborhoods or open to developers of, say, 100- to 200-acre tracts as well.

How would such loan insurance work? The committee talked over several ideas. Says one member: "Perhaps the land might be cleared by the developer, then FHA would insure a loan for enough to put in the improvements. Or FHA might insure the loan for 70 or 75% of the land's valuation. Or perhaps the de-

*Census figures from a 1957 study of locally assessed properties indicate the nation had nearly a five-year supply of developed lots (6,000,000) in urban areas. But many experts figure most of these lie in fringe areas around cities—many of them blighted—where builders would have trouble selling one-family homes.

veloper could do the work, then certify his costs to FHA and get an insured loan for 85 or 90% of his actual costs."

Then as each lot is built the developer would pay off the loan for that portion of the total—but not just 100% of the loan; he would pay 110%. Thus when he had paid for 90% of the lots he would have paid off the entire loan. This would discourage developers from leaving the least desirable lots to the end of construction.

Is short-term finance bad?

Land development loans should also help stabilize the pace of housing construction, the conferees were told. Now, most builders must develop land with short-term financing (a year or 18 months) from banks. "When a builder gets pinched," explains one committeeman, "he has to build and he will usually pay off his land loan with his construction money and then hope to make a quick sale. If he doesn't, he's in trouble. Some land developers have had the same problem and have had to dump lots cheap to raise cash. This, too, has created surpluses in housing."

FHA gave no indication whether it plans to press now for HHFA, Budget Bureau and White House approval of land insurance. All three must concur before an Administration proposal could go to Congress. But after the meeting Commissioner Mason said: "One of the present handicaps to production of good new homes at lower costs is the scarcity of improved land." He noted that the search for land is taking builders ever further from central water and sewer systems, and other community facilities.

Is this sound community growth? Mason didn't say. But more and more experts are coming to think it isn't.

Supreme Court rules 608 cannot be run as hotel

Can FHA force builders and lenders to conform to changes in its regulations long after it insures a mortgage?

Some industry leaders fear that it now can. And they point to a recent Supreme Court decision in a long-pending 608 case to prove their point. "It says, in effect," according to one housing attorney, "that you are never safe dealing with FHA."

The case in point involved the 156-unit Darlington Apartments in Charleston, S.C. It was built by Contractor Leonard D. Long in 1951, before the 1954 Housing Act banned use of 608 projects as transient hotels.

Long insisted he was not bound by the 1954 law, and rented some units as hotel rooms. FHA filed suit in 1955, contending Long was violating the law.

In 1956, a federal district court ruled in Long's favor. It held that FHA could not bind Long to adhere to the 1954 law in a project built in 1951.

But now the Supreme Court has overthrown this decision by a 5 to 3 vote. It held, in effect, that the 1954 change in the 608 continued on p 56A

52

There's a built-in for any priced home you plan to build...in the complete new line of

General Electric Builder-designed

Ovens and Cooktops



a distinctive kitchen: Custom double-oven in new, -tarnish copper-finish; cooktop with controls at eye el... built into hood with exhaust fan and floodlight.



Dramatic beauty for any kitchen: Custom automatic oven in Turquoise Green. Matching cooktop has remote push-button control for wall or cabinet installation.



e low-cost kitchens automatic convenience plus coloreye-appeal with automatic deluxe oven and cooktop unny Yellow. Also in Pink, Turquoise, Brown, White.



For the ultimate in beauty and convenience: Two complete ovens in minimum space. Ovens and cooktop in Woodtone Brown; the ideal unit for custom-built homes.





ELECTRIC

Builder-designed

★ Choice of...single ovens...double ovens ★ The newest automatic features ★ 2- and 4-unit cooktops

New!

TWO FULL-SIZED OVENS THAT INSTALL AS A SINGLE UNIT!

This G-E Double-Oven is *one-piece*—slips into single opening—uses only one conduit connection. Each oven has its own automatic timing, broiler, floodlight; top oven has rotisserie and meat thermometer. Controls for both ovens on single, eye-level panel. Both oven doors slide off.



with features you'll find easy to talk about



Automatic Oven Timer that's as easy to set as a clock! Set start time on top dial . . . set stop time on bottom dial. Cooks meals while you're out.



Removable oven door makes it easy to reach any part of oven for cleaning. Open door, release safety latch, slide door off. Slides back on as easily.



Meat Thermometer takes guesswork out of perfect roasting or broiling. Dial the degree of "doneness" you want buzzer sounds when meat is ready



Automatic rotisserie barbecues a 20-lb. roast! Stainless steel spit. Removable, sure-grip handle lets you handle hot spit safely and easily.





Big 21" wide-opening oven has sturdy platform door. Gives room enough for complete oven meals; you can even bake four pies on one shelf.

Plus these important features:

- Focused-Heat broiler for "charcoal type" broiling.
- · Built-in oven vent keeps door and controls condensation-free.
- · Automatic oven floodlight . . . recessed into oven wall.
- Separate minute timer . . . sets from 1 to 60 minutes.
- Eye-level controls . . . with large, easy-to-read dials.
- Picture-window oven door . . . overwhelming preference of women.
- Extra hi-speed units for clean, safe, dependable cooking.

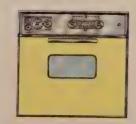
They mix 'n match!





Custom Double-Oven Model J-780; Cooktop J-890 with controls built into hood. The perfect combination for custom installations.

Mix or match ovens and cooktops in like or contrasting colors! Ovens in Petal Pink, Turquoise Green, Canary Yellow, Woodtone Brown, White, Copper finish, Satin Chrome. Cooktops in all colors and stainless steel.





De Luxe Oven Model J-720; Integral control cooktop J-820 offers smart styling, automatic features and fast, low-cost installation.

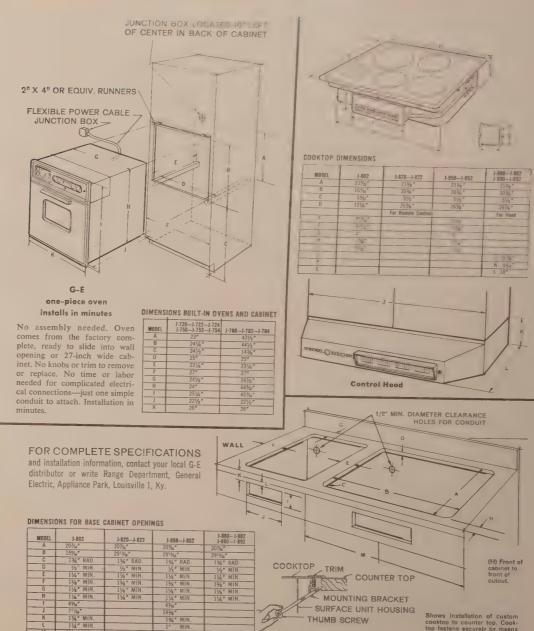


Custom Single Oven Model J-750 and remote-control cooktop J-850 combine truly modern features with the most advanced styling.



Model J-802—2-unit cooktop with remote controls. In stainless steel. Use in pairs or with 4-unit cooktop for flexibility and convenience.

New, simpler, quicker installation!



From carton to cooking in 32 minutes!

G-E Ovens and Cooktops are engineered for easy installation.



One-piece drop-in cooktop has built-in pushbutton controls . . . no separate control panel to mount. Fits flush with counter top.



Six thumb screws to tighten . . . one conduit to connect . . . done! Oven and or 27-inch cabinet. Comes from factory cooktop installed by The Eagles Co., ready to install-no knobs or trim to Louisville, in less than 32 minutes.



One-piece oven slides into wall opening remove or replace.

new models for every priced home!

- ★ Pushbutton controls ★ Fast, fully enclosed units
- ★ 4 colors plus white, copper-finish, satin chrome

New!

HE LUXE EXHAUST HODD HAR EYE-LEVEL TOOKYOP CONTROLAT

EASE OPEN

Pushbutton controls for this cooktop are at eye level—built right into the copper-finish hood—always easy to see and reach! The hood contains a quiet, powerful exhaust fan which is easily removable for cleaning; built-in lamp floodlights the entire cooktop area.



Built-in news that will rock the indust

General Electric ONE-PIECE Built-in Ran

Offers built-in glamour at installation savings up to \$100!*

And saves 5 square feet kitchen space!

Space to add a feature



Builder-designed

to give these installation cost advantages:

Single conduit connection . . SAVE up to \$25.00

No oven cabinet needed . . . SAVE up to \$45.00

No cooktop base cabinet needed SAVE up to \$20.00

No waste in counter-

\$110.00 Less base panel below oven of G-E

10.00

ONE-PIECE....

NET SAVINGS \$100.00

*Savings approximate. They will vary with local material, equipment and labor costs.



It's the biggest news of the year for builders! This new G-Built-in Range is a de luxe large oven and dropped 4-unit in one piece to reduce your installation costs!

MUCHTY EQUIPES for consumer acco

- Big-capacity oven
- Removable oven door
- Focused-Heat broiler
- Automatic Oven Timer and Minute Minder
- Hi-speed pushbutton unit and master indicator light
- Fully enclosed bake and b
- Available in Pink, Turquo Brown, White

GENERAL



ELECTRI

regulation merely put into words what had been the original intent of Congress. Wrote Justice William O. Douglas: "Those who do business in the regulated field cannot object if the legislative scheme is buttressed by subsequent amendments to achieve the legislative end."

Douglas noted that "no right or privilege to rent to transients is expressly included in the Act nor fairly implied."

FHA attorneys have not interpreted the

decision to be as sweeping as some in the housing industry. They feel it does not give FHA power to require retroactive conformance in all cases. In fact they contend the door is still open for some 608 owners to rent units as hotel rooms—if they have FHA approval. This interpretation is a convenient one for FHA. If it did refuse to allow 608 hotel operations, it would probably force several into bankruptcy, thus end up with projects on its own hands.

Builders offer plan to put FHA, VA interest rate under Fanny May rule

Here are some of the major things home builders are expected to shoot for at this session of Congress, according to Washington

- 1. Equality for FHA and VA interest rates. The aim is to end big discounts, which nobody likes. Congress has usually shied away from boosting VA interest, but if ever a case can be made it is now, with VA loans going at 7½ to 8½ points discount on the West Coast. VA officials themselves back the idea of giving them the same flexibility FHA already enjoys (up to 6%), which gets Congress off the political hook for making decisions to boost the rate.
- 2. A central mortgage bank (see p 57).
- 3. No more FNMA special assistance money from the Treasury. NAHB directors threw this idea out of their legislative program at San Antonio last fall. But some builders want it reconsidered at NAHB's Chicago convention this month.
- 4. Instead of special assistance from FNMA, a revamped setup under which FNMA would take over power to adjust interest rates on FHA and VA loans in such a way that it will be possible to translate its mortgages into coupon-bearing certificates that can be sold at close to par in the open market. This might mean different interest rates in different states, on the same unchallenged principle that now leads FNMA to vary discounts from state to state.
- 5. Re-authorization of a long lapsed and

- never used law permitting creation of federally chartered local mortgage associations. These would serve merely as local devices for translating FHA and VA mortgages into marketable securities. They would let local builders and mortgage men tap new sources of mortgage money.
- **6.** Permission for FHA to spend 35% of its premium income to operate. Aim: to let FHA hire more and better people and operate more efficiently. This plan was in effect in 1949-51, when Congress let the agency spend up to 35% of its premium receipts. This provision has not been repealed, but it was nullified by the 1952 Appropriations Act, despite FHA's plea that 35% was less than what private insurance companies spend out of their premium income.
- 7. Forty-year mortgages.
- 8. Trade in financing, along the lines proposed by Past President Dick Hughes, to let builders qualify for the same loan-to-value ratio home owners can get, with 15% held in escrow until a buyer is found for the trade-in house. And FHA would base its financing on appraisal, instead of builder's acquisition cost
- **9.** Continuation of VA for post-Korean veterans, but without any subsidy (i e, with the veteran paying whatever insurance premium is necessary).
- **10.** A new FHA section to insure loans to builders for developing land installing community facilities.

COMMUNITY FACILITIES:

Sewage ban hurts building in 6 more Nebraska towns

A State Health Dept ban which crippled homebuilding in the Omaha area has been extended to six small Nebraska communities along the Missouri river.

The ban prevents extension of sewer lines which dump raw sewage into the river. The health department warned the six towns that they are "showing no activity of sufficient importance to indicate steps are being taken to stop pollution."

This crackdown comes just as the state's Water Pollution Control Board is about ready to lift a sewer extension ban in the eastern third of Omaha imposed in August (Oct, News). This follows approval by Omaha voters in November of an \$8 million sewer bond issue to finance a start on the disposal problem.

But the ban will remain in effect in western Omaha and the area outside the city—where most of the tract building takes place. Builders have turned to lagoon-type treatment plants and septic tanks there.

The six new towns covered by the ban are South Sioux City, Dakota City, Bellevue, Nebraska City, Plattsmouth and Niobrara.

Ironically, while this stymies building in these towns, Iowa communities just across the river are unaffected. Iowa has exerted no pressure to curtail river pollution.

Five-acre zoning

Radnor Twp, outside Philadelphia on the Main Line, is planning to impose five-acre zoning on an eighth of its area. The aim is to keep a sparsely populated wooded belt just as it is, keep out housing developments and shopping centers. Planners hope this will maintain an "island of natural greenery" in tightly packed suburbia.

PUBLIC HOUSING:

Prefab public housing shows little increase

Prefabbers are finding the going slow in their efforts to crack the public housing market.

Big problem is cost. Says a PHA memorandum: "The claims of manufacturers that at least \$1,000 per unit could be saved have not been borne out so far." It adds: "Three projects provide too small a sample of a building method that is based on volume production to draw any final conclusions."

But in South Norfolk, Va., when public housers announced a 100-unit project, the two low bids were for conventional construction, the four high bids for prefabs.

Now, prefabbing's potential for cutting public housing construction costs appears about to undergo its biggest test. PHA says there are 3,926 wood-frame units of public housing being planned for this fiscal year where prefabrication could be used. The agency predicts prefabbing or use of factory-built components will "increase steadily" because of: 1) the high cost of on-site labor, 2) better quality control in factory production and 3) quicker building via prefabbing.

Bulk of the possible prefab public housing units now on the drawing boards are in New York, New Jersey and New England, according to PHA figures. Samples: Chicopee and North Adams, Mass. both plan 150 units of brick veneer on wood frame. Plattsburgh, N.Y. plans 50 frame units with some brick veneer. The market potential, by regions:

Possible Prefabs			
Regional office	Localities	Projects	Units
Atlanta	2	3	115
Chicago	5	5	1,960
Fort Worth	0	0	0
New York	25	25	2,375
San Francisco	1	1	100
Washington	4	4	276
TOTALS	37	38	3,926

AIA warns public housers

Architects have handed the Public Housing Administration an ultimatum: boost fees or AIA will withdraw its support of "the incumbent administration of PHA."

AIA also kicks that PHA does too much construction supervision, relegating architects to a secondary role. The design men think they should be free to negotiate any deal they can with local housing authorities.

For years, AIA has been the only private housing industry group backing public housing.

\$50 security deposits

Chicago's biggest landlord, the Chicago Housing Authority, has begun collecting \$50 deposits from its 18,500 tenants—security against damage or nonpayment of rent. Comments the Chicago *Tribune:* "This is another small step away from the authority's former policy of operating subsidized slums largely for the benefit of reliefers and shiftless persons."

Housing the aged

Federal public housing, its officials have just found, is home for some 84,000 persons aged 65 or more. That is 5% of public housing's 1.7 million population.

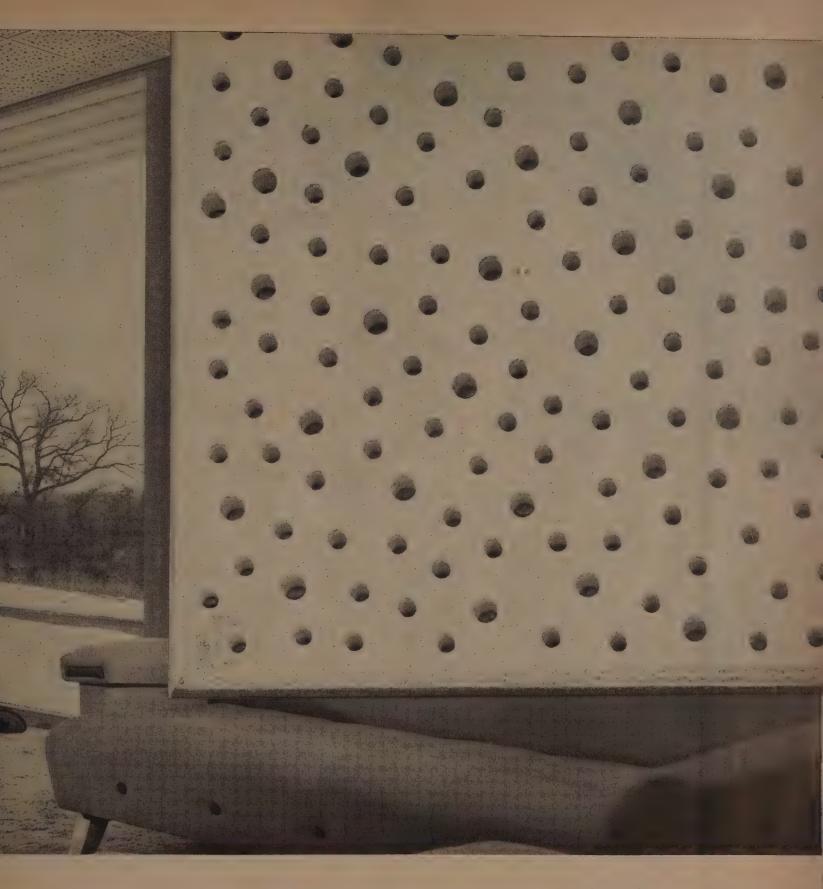


Casual Random's beauty secret:

Not so very long ago, all drilled fiberboard ceiling tile—including Insulite—was produced with ordinary twist-type bits. So all tile had fuzzy, bewhiskered holes, sometimes badly clogged with fiber.

When Insulite switched to the use of costly core drills, ceilings finished with our new Acoustilite instantly showed a finely detailed, cleaner and more handsome look. This sharp edged, cylindrical drilling makes a truly amazing difference—both in regular drilled Acoustilite and in our tremendously popular Casual Random pattern, shown above.

Hollow-core drilling is one dramatic difference in ceiling tile that every buyer can see at a glance. Show that difference to homeowners, to commercial



fuzz-free hollow-core drilling!

building owners, and to architects. Here's a marvelous extra-quality feature at no extra cost. It means more ceiling tile jobs for you . . . easier selling . . . and perfectly satisfied customers! For special information on Casual Random or any of the other fine Insulite ceiling tiles, write us—Insulite, Minneapolis 2, Minnesota.

Insulte & Ceiling Tile

Insulite Division, Minnesota and Ontario Paper Company, Minneapolis 2, Minnesota

ACOUSTILITE IS A REG. T.M. U.S. PAT. OFF.

Is the price of money easing again? Discounts shrink in four cities

First signs are appearing of another turn in the mortgage market. Discounts on FHA and VA loans have shrunk in four key cities: Boston, Philadelphia, Houston and Los Angeles.

This shift comes just four months after discounts went into a steep rise. It comes just one year after the start of the recession's short-lived spell of easy money. Details:

Boston: "There is definitely more money available," reports Robert M. Morgan, vice president of the Boston Five Cents Savings Bank. The Boston out-of-state market on minimum down FHAs is up from 96-96½ to 96-97.

Houston: Minimum down FHAs are up to a 96½-97 spread from the 96-97 of a month earier—with a tendency to the high side.

Los Angeles: VAs are up from 91½-92 to 92-92½. Minimum down FHAs are up ½ point to 96-96½.

Philadelphia: The FHA market has firmed up at least a half point, though there is still a 98½-par range because local investors are still offering over the market prices.

Smaller discounts seem to reflect a scarcity of mortgages more than any significant increase in investor demand.

Insurance companies, which normally buy chiefly on quotas, are buying few uncommitted immediates. New York mutual savings banks are bargain hunting as usual. Only the New England savings banks are seeking mortgages aggressively.

Robert E. Morgan, executive vice president of Colwell Co in Los Angeles,



has this explanation for the ½ point price improvement: "Most of the mortgages being produced now have already been committed, either by private investors last spring or summer or by Fanny May in its special assistance program 10." Morgan says some lenders are hedging against the chance Congress may vote more money into the par-purchase special assistance program. This would grab mortgages away from the private market, tending to push up prices.

One Los Angeles savings & loan is so anxious to put its money out, it is paying 92 for \$13 million worth of VA 4½ s—and buying them from local sources. The price is the equivalent of 94 on VA 4¾ % loans.

More mortgage bankers look for smaller discounts early this year.

Comments Maury O'Hearn, vice president of the Bankers Mortgage Co of San Francisco: "Savings banks are showing more interest in what we will have available after the first of the year. The general tone and feeling of our conversations is that they will be back buying. I believe prices will tend up slightly." Another mortgage man in the Southwest says he will take no offer less than 98 for FHAs to be delivered in the second quarter.

But this optimism is not unanimous. Allen Bradley, assistant vice president of Mortgage Investments Co in Denver predicts: "It will be June before we see a better market."

Whatever may happen in 1959, mortgage bankers in the South, Southwest and West are praising Fanny May as the hero of the 1958 fall mortgage slump.

Fanny May did not cut its FHA and VA secondary market prices in October and November though at the time they were slightly above the market.

Says Jack Yates, vice president of Stockton, Whatley, Davin & Co of Jacksonville: "Fanny May really bolstered the market. If it had cut its prices the savings banks would have cut theirs immediately, regardless of other factors in the market. The New York savings banks always offer a little less than Fanny May in hope of getting a bargain."

Despite Fanny May's higher prices, its secondary market buying has not risen nearly as much as some mortgage men had expected. Purchases totaled \$20 million in November, up from \$10.8 million in October but still well below the \$85.1 million-per-month rate of 1957.

Few S&Ls plan to make 90% conventional loans, call risk too great

Don't expect to see many federal savings and loans making 90% conventional mortgages soon.

Though the Home Loan Bank Board approved 90% mortgages up to \$18,000 (Nov, News), it is clear that only a few S&Ls will be making them now. And they will be only the biggest ones in the biggest cities where competition among lenders is stiffest.

A few S&L men contend S&Ls and 90% conventionals will walk away with the business that now goes through mortgage bankers to FHA in high cost cities. They point out that the FHA down payment advantage shrinks to insignificance on houses priced around \$20,000.*

But a House & Home check of the biggest S&Ls in three midwest cities where S&Ls are particularly strong indicates that mortgage bankers and FHA have no cause for worry now. The main effect of 90% loan approval apparently will be to prod more S&Ls into making 80% instead of 65 to 75% loans. The situation:

Chicago: Three big S&Ls, First Federal, Talman and Home Federal now make 90% loans on a limited basis on both new and used houses. All charge 5¾% or 6%—¼% above the rate on an 80% loan of comparable quality.

Talman President Emil J. Seliga notes his S&L

Talman President Emil J. Seliga notes his S&L is making the high ratio loans only on a "very selective basis," adds: "There is a wide hesitancy on the part of many S&Ls to make 90% conventional loans." He doubts if any small S&Ls will make them.

President Benjamin Keach of the big Chicago Federal agrees, admits his S&L has made none because they are "too risky." President John P. Domeier of the Oak Park Federal is aghast at the thought. Says he: "You shock me when you talk of 90% loans. The risk is fantastic."

Milwaukee: Only one big S&L, First Federal, has made 90% loans—though it reports only small demand for them. Says Executive Vice President Allen Pflugradt: "We like it." He adds: "Ten years ago I'd have been afraid of a 90% loan." Good experience with VA loans has changed his mind.

Only two of the other six largest federals in Milwaukee have decided to make 90% loans. Milwaukee Federal will make them but only with mortgage insurance (see below). Green Bay Avenue Federal expects to make 90% loans on new builder houses (though the regulations limit the loans only to owner-occupants on completed houses). President Lawrence H. Meyer predicts he will reach the limit for 90% loans by mid-1960. (Regulations limit volume of such loans to 10% of gross assets.)

Secretary-Treasurer Edward H. Henning of United Federal has discouraged builder inquiries about 90% loans. Says Henning: "We're kind of old fashioned I guess."

Minneapolis-St Paul: None of the big federals are making 90% loans. None plan to. Says President Walter R. Youngquist of the Federal: "I think 90% is too liberal on a non-insured basis and I doubt if savings & loans in this area are going to use this opportunity to any large degree."

Statements from other S&L executives in the Twin Cities back Youngquist up. Says Vice President G. P. Uttley of the Minnesota Federal: "I don't know of anyone here loaning even 80% today. We now loan 70 or 75% of our valuation. We don't feel 10% equity is enough protection these days."

tection these days."

Only Vernon Welch, executive vice president of the Minnesota S&L League, voices optimism about 90% loans: "As the market becomes more

* A \$20,000 house would require a \$2,000 down payment with a 90% conventional mortgage, \$1,780 with a minimum down FHA.

competitive, savings & loan associations doubtless will take advantage of the higher limits. As this happens, conventionals will be competitive with FHA and the FHA market could—I don't say would, but could-dry up.

Insurance on 90% loans

What might make a big difference in the volume of 90% conventional loans is private mortgage insurance. Now that the US S&L League has abandoned its plan for a government-sponsored insurance scheme (see p 60), it focuses attention on two-year-old Mortgage Guaranty Insurance Corp in Mil-

MGI insured its first conventional loan on April 1, 1957 (March & Dec '57, News). By November, 1957, it had insured \$1,800,000 in conventionals. Last November, total insured mortgages reached \$55 million.

MGI Chairman Max H. Karl predicts the monthly rate of insured mortgages will hit \$20 million soon. He expects the total to reach \$150 to \$200 million by November of this year. Half of this volume, he believes, will be in conventionals with an 80 to 90% loan ratio. By mid-1960 he expects insuring volume to reach a rate of \$500 million a

More risk, more premium

MGI had yet to insure a 90% loan on Dec 1. But it had six applications from Milwaukee S&Ls. It was awaiting state approval of its new regulations for 90% loan insurance. These would increase its own reserve requirements from the present 30% of premium (on 80% or under loans) to 50% for 90% loans.

The premium itself will also be higher-a flat 2% for the first 10 years of full coverage. On 80% loans, MGI has been charging 1/2 % of the principal for the first year and 1/4 % of the declining balance in each succeeding year. It is 25% less if prepaid for 10 years. With a 90% mortgage, MGI will still allow the ½%-¼% premium plan but will limit liability to 20% of the mortgage.

MGI is now operating in 14 states* vs only three a year ago. It has applied to do business in 20 more.† Karl hopes to insure mortgages eventually in all states but Alaska (where the default rate scares him) and Puerto Rico.

*Wash., Mont., Ariz., Minn., Wisc., Ill., Mo., Va., W. Va., S. C., Del. and Ark. † Mass., Pa., Ohio, Mich., Fla., Ga., Ala., Tex., Okla., Kan., Ky., Col., Utah., N. Dak., Conn., R. I., Iowa, S. Dak., N. C., Iowa and Idaho plus Hawaii and Wash., D.C.

Delinquency rate stays low despite '58 recession

Despite the recession, homeowners continue to maintain an excellent repayment record on their mortgages.

Mortgage Bankers' Assn reports for the first nine months of the year-which covers the deepest part of the recession-show the delinquency rate was only 2.23%. This duplicates the same period of 1956. It is little above the 2.05% of 1957. It represents 57,199 delinquencies out of 2,568,008 mortgages.

Highest delinquency rate ever reported in MBA's survey was 2.53% in December 1953. The report for three quarters of 1958:

DELINQUENT

Type mortgage	1 month	2 months	3 month:
VA	2.06%	0.46%	0.33%
FHA	1.45%	0.29%	0.16%
Conventional	1.03%	0.24%	0.15%

Builders gird for major effort to get central mortgage bank

Builders have been talking fondly of a Central Mortgage Bank for years without ever making a real effort to get one.

But apparently they have decided that this

NAHB's legislative policy committee has proposed to the executive committee that a central mortgage bank be a major goal in the 86th Congress.

Ground for this legislative push is being well spaded. At least four papers presented to Sen John Sparkman's housing subcommittee for its long range study of mortgage credit needs suggest either a central mortgage bank or changes in Fanny May which would go far in the same direction.

The aims of a mortgage bank are well known (see below). They were set down at a House & Home Round Table (Aug '51) and restated at another Round Table five years later (H&H, Nov '56).

But individual ideas vary as to how a central bank should operate. These differences may spell the difference between passage and defeat.

Key points of contention:

• Some central bank advocates, like Housing Securities' President Tom Coogan, insist the bank should have access to the Treasury -be allowed to sell its debentures to the Treasury when the private market is not favorable.

The Administration and the Federal Reserve Board are strongly opposed. But—as long as the bank gets its money only from the open market by selling debentures the Fed is inclined to go along with the whole idea of central mortgage banking-making only one other reservation (see below).

• Most central bank supporters believe its board should take over regulation of FHA and VA interest rates to assure that they remain close to the market.

Congressional Democrats, who have made it a matter of piety to keep interest rates frozen, seem unlikely to turn over power to set rates to a non-political body.

On the other hand, the Fed favors a free FHA-VA rate, looks unfavorably on any

sort of an administered rate. Judging from statements made at the MBA convention by Dr Raymond Saulnier, chairman of the White House Council of Economic Advisers, the Administration shares this view.

Coogan's plan

Coogan, a past president of NAHB (1950), has become a central mortgage bank's most articulate and persistent advocate. In his

Walter Bennett

monograph for the Sparkman subcommittee, suggests that a bank be built on the present foundation of Fanny May. Besides the points noted below, he would:

• Require the bank to pay a price for its mortgages below par to assure continuing direct purchase of mortgages by private investors.

• Use the bank's con-

trols to spur housing during recessions and to brake it when money is easy and overbuilding is a danger.

• Advise FHA and VA on their operations which affect the mortgage market.

Coogan insists that a sub-par purchase price would preclude the central bank from becoming a primary market. But he contends its operations will have a stabilizing effect, will "prevent the growing practice of investors to play the cyclic swings in mortgage

Lenders divided

No other industry association has a published policy on a central mortgage bank. Savings & loan men admit they dislike the idea. Mortgage bankers, as an association, tend to frown on it though many of them individually espouse the idea.

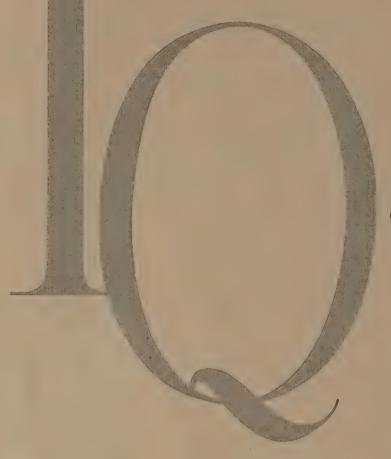
Harold Finney, executive vice president of

continued on p 61

What a central mortgage bank might do

- Smooth out the flow of credit by selling long and short term debentures to the public, using the proceeds to buy FHA and VA mortgages when money is tight.
- Open the way for pension funds, which have historically shunned real estate mortgages, to put money into housing via the bank's long term debentures.
- Make loans to mortgagees on the security of FHA and VA mortgages, becoming in effect a central warehousing bank.
- Regulate FHA and VA interest rates so they would always be high enough to attract private investors and prevent the mortgage bank from becoming only a dumping spot for loans the private market will not buy.
- Be managed by an independent board, removed from politics, much like the Federal Reserve Board.
- Make firm advance commitments and perhaps even extend a line of credit so builders could get construction money more easily.

Individuality rates as a No. 1 requirement with home-buying prospects today. They want homes that are distinctive—not "look-alikes." Curtis helps you sell individuality with 97 different window styles and combinations...88 different door styles!



Quality is another "must" with home buyers. With Curtis doors and windows, quality is guaranteed. More than 30 years of national advertising have made "Curtis" a household word, known and respected by millions.

why progressive builders are making profits with...

CURTIS

Now the individuality and quality of Curtis doors and windows are available for homes in every price bracket! Whether you build five or 500 homes a year, you can use the powerful, sales-making prestige of the Curtis name and reputation. Join the many alert builders who are proving this with profits!



Bob Schmitt of Bob Schmitt Homes, Berea, Ohio, uses Curtis windows to vary proportions of masses and styling with one basic plan.

here's how CURTIS

helps you sell



NATIONAL ADVERTISING

a big schedule of fullpage, full-color advertising in Better Homes & Gardens, plus fullpage advertisements in New Homes Guide and other consumer building manuals.



CURTIS GUARANTEE CERTIFICATE

a powerful salesmaking tool, as many builders have found!



BUILDER AWARD PLAQUE

certifying you as a quality builder who brings home buyers a high degree of individuality of design with quality materials and workmanship.



IDEA BOOKLET

sketches and ideas for builders to use in staging a unique, new model-home promotion.



SALESMEN'S SALES CLINCHER

a display folder giving facts and figures proving that it pays to buy a quality home, based on a realtor survey.



POINT-OF-SALE DISPLAYS

national ad display easel ...window stickers... signs to identify your model homes...plus literature, ad mats, radio and TV scripts, publicity and other localized sales helps.

Start a year of better profits -mail the coupon!

Individuality and Quality in doors and windows

Curtis Companies Service Bureau 200 Curtis Building, Clinton, Iowa

I want to know more about Curtis I.Q. plan for more sales and profits.

HH-1-59

Please have your representative explain the plan to me.

Send full information	•
-----------------------	---

Name	• • • • • • • • • • • • • • • • • • • •
Address	• • • • • • • • • • • • • • • • • • • •

City.......State......

Builders rapped for promoting 'thinly disguised' direct loans

Savings & loan associations never had it so

The housing industry's principal bankers could (and did) point proudly to these statistics of prosperity as they met in San Francisco for the 66th annual convention of the US Savings & Loan League, US housing's oldest trade group:

- Savings growth (despite the recession) outstripped any previous year in S&L history, rose an estimated \$6 billion.
- Mortgage lending (12% above its 1957 pace) seemed headed at least for a tie with record 1955
- S&L growth was horizontal as well as vertical. In the first nine months of 1958, 57 new state-chartered insured S&Ls and 28 new federal S&Ls were started. This boosted the total insured state S&Ls to 2,057, federal S&Ls to 1,800.

Worried competitors

Growth of S&Ls in the last decade has been so brisk it has competing mortgage lenders talking to themselves. (Sample: "We have not kept ahead," said President Frederick C. Ober of Fitchburg, Mass., Savings Bank last month.) In 1955-57, share capital of S&Ls jumped 24.6% while mutual banks' deposits climbed only 12.4%.

Will substantial gains continue? Yes, says incoming US League President Clarence R. Mitchell. "But I doubt if it will be at the

same rapid rate." Though S&Ls were—in the words of a widely respected Southern California S&L executive—acting "fat and sassy," they were not sitting still while industry problems multiplied around them.

Attack on NAHB

Sessions had scarcely opened in Nob Hill's gleaming new Masonic Temple (one of the finest spots in the US for big convention meetings, with its carpeted floors, bright lighting and stage nearly circled by seats), before outgoing President Joseph Holzka took after "organized home builders" for promoting Fanny May special assistance* and VA direct loans. The \$1.33 billion poured into the two last year, he noted, "is slightly more" the total volume of life insurance company home loans in 1957. "This means that almost without notice the direct loan programs have become an undesirable new force on consequence in home financing," he continued. "It is a matter of deep concern to me that the greatest support for these unseemly and unnecessary proposals has originated within the national leadership of the organized home builders to whose local chapters so many of our members belong and help support financially . . .

He also criticized builders not dealing "directly with the problem of housing costs."

Holzka called Fanny May special assistance a "thinly disguised government direct

loan program." In its policy statement, the league agreed. It opposed more "subsidized competition" in mortgages.† It also rapped the idea of 40-year mortgage maturities (which is being espoused by NAHB).

League officials confirmed that they will put aside efforts to persuade Congress to approve their plan to insure the top 20% of otherwise conventional 90% loans. Reason: the HLBB has approved 90% conventional loans for federal S&Ls—although few apparently will make them. The league will ask Congress to raise the insurable limit on S&L accounts from \$10,000 to \$20,000. And it voted to support HLBB proposals to prohibit S&Ls 1) from paying a commission (usually 1%) to brokers who bring in deposits, and 2) from accepting deposits from savers in other areas than their own.

President Mitchell insisted the flow of eastern capital into California via brokers "causes pressure on savings interest rates generally and in the final analysis on mortgage rates." Executive Vice President Norman Strunk added that while some eastern brokers were "high class, several come close to being bucket shop operators." California S&L men fought the league's stand.

*NAHB has now dropped its support of such aid for under \$13,500 homes.

†Except for military housing and housing the

Photos: H&H Staff



NEW PRESIDENT Clifford R. (for Robert)
Mitchell (1) gets his badge of office pinned on by predecessor, Joseph Holzka (r). Mitchell, a ruddy and youthful looking 50, is president of the \$36 million First Federal S&L of Kansas City Mo.



HOUSING POLICY discussion brought from Sen John J. Sparkman (D, Ala), chairman of the Senate housing subcommittee (l), a suggestion that FNMA special assistance should be limited to "emergencies like the '58 recession" plus such items as co-ops, military, renewal and the elderly. He shunted aside a suggestion by S&L kingpin Henry Bubb (r) that he seek an appropriation "to study the high cost of housing."



NEW TECHNOLOGY is not being used in housing because of union restrictions, warned Prof James Lendrum of the University of Florida. He urged S&Ls to fight this "so your borrowers can have the advantages they deserve."



FHA's CERTIFIED AGENCY PROGRAM will not be extended until Congress votes FHA more authorization, said Graham Northup, its boss. Now participating: 1,250 commercial banks, 400 S&Ls, 250 mortgage and 60 insurance firms.



TRADE-IN FINANCING is the secret to unlocking the quality house market, noted House & Home Editor P. I. Prentice. He urged the HLBB to let S&Ls make unamortized short-term loans to builders for trade in houses.



FIXUP LOANS make so much profit for his S&L, said President James Bent of Hartford Federal, he regards them as "better than government bonds." Bent is also president of rival Natl League of Insured Savings Assns.

continued from p 57

Citizens Mortgage Co in Detroit likes it, explains: "Let us hypothecate our loans to take care of these dips and rises in the market. I agree with the NAHB idea. We need stability more than anything else in this business.'

Baltimore Mortgage Banker Jim Rouse, in his monograph for the Sparkman subcommittee, agrees: "It has always seemed to me that there should be some simpler and more direct machinery by which debentures could be issued against the collateral of one or more FHA mortgages and sold to individuals and other investors who would accept real estate credit but did not want the burden of administering individual mortgage loans."

But Rouse adds that such a facility would not be as important as simply freeing the FHA and VA interest rates.

Realtors may back it

Of all other trade groups, builders are most likely to get support for a central bank from NAREB.

Herbert U. Nelson, the late executive vice president of NAREB, was one of the first active supporters of the plan years ago.

Realtor Robert E. Scott of Elizabeth, N.J., 1958 vice chairman of the Realtors Washington Committee, wrote in his monograph for the Sparkman subcommittee that Fanny May should be reconstituted as a discount bank.

He envisions that at times when the money market tightens Fanny May could function as a warehouse "until the banking industry and the secondary market can again operate normally.

"FNMA should advance commit to warehouse unsold FHA and VA loans for a period of one year, advancing the borrower 95% of the reasonable market value established by FNMA." Scott also asks that Fanny May be required to treat mortgages on existing houses the same as those on new homes.

FHA says discounts up but beginning to level off

FHA Commissioner Norman Mason says the cost of mortgage money is starting to level off. FHA's own survey of discounts shows they rose 0.2% from November to December. This compares with a rise of 0.6%

during October and a rise of a full point during September.

Prices on 25-year 10% down FHAs slipped to a national average of 97.3 on Dec 1, says FHA. The report is based, not on actual sales, but on opinions of 71 FHA field directors.*

Price declines were reported in all regions except the Northeast. Details:

NET PRICES FHA 51/4 % 203(b) MORTGAGES Immediate Delivery

	DEC 1,	1958	Nov 1
Zone	Average	Range	Average
Northeast	98.7	98-par	98.5
Middle Atlantic	98.3	96.75-par	98.8
Southeast		95-98	97.2
N. Central	97.1	96.25-99	97.3
Southwest	97.2	96-98	97.3
West	97	96-99	97.2
US	97.3	95-par	97.5

*Mortgage bankers at their annual convention in Chicago in November were critical of FHA's survey on the ground that reported discounts are too small. MBA's FHA committee suggested the agency either make an effort to get a more accurate picture of the mortgage market or stop making the survey.

NEWS continued on p 64

MORTGAGE MARKET QUOTATIONS

(Sale by originating mortgagee, who retains servicing.) As reported to House & Home the week ending Dec 12, '58.

FHA 51/4s (Sec 203) (b)

VA 43/4S

Spec Asst	Scdry Mkt FHAxy	Minimu 30 year Immed	m Down*	Minimur 20-25 yea Immed	r	10% or n 20-25 yea		City	30 year no to 2% Immed	down Fut	25 year 5% down	Fut	20-25 yea 10% dow Immed	n or more	Conventional Interest Rates
96	97	96-97	96-97	97	97	97-98	97-98	Atlanta	a	a	a	a	a	В.	5 1/2-5 3/4
96	98	par-1018	par-1018	par-101s	par-101¤	par-101 ^x	par-101s	Boston local	99-101	99-101	99-101	99-101	99-101	99-101	5-51/2
		96-97	96-97	96-97	96-97	96-97	96-97	out-of-st	92-921/2	92-921/2	92-921/2	92-921/2	8	a	
96	97	96-98	96-971/2	97-98	96-97	97-98	96-97	Chicago	91-92b	a	91-92b	a	91-92b	a	51/4-53/4
96	97	97-99	96-97	97-99	96-97	971/2-99	971/2-99	Cleveland	94-95b	92-946	a	8	5	a	5 1/2
96	96 1/2	951/2-961/2	941/2-95	95 1/2-96 1/2	941/2-95	971/2-99	961/2	Denver	90-91 ½ b	90-92b	921/2-931/21	91 1/2-92 1/2 1	93-94b	921/2-931/26	51/2-6db
96	96 1/2	961/2-97	97-97½b	961/2-97	97-97½b	97-971/2	961/2-97	Detroit	92 1/2-93	92-92 1/2	921/2-93	92-921/2	93-931/2	921/2-93	5 1/2 e-5 3/4
96	97	961/2-97	961/2-97	96 1/2-97	961/2-97	97-98	97-98	Houston	92-93	92-93	92-93	92-93	a	ā	51/4-53/4
96	97	96-97	96-97	96-97	96-97	97-98	97-98	Jacksonville	92-921/2	92-921/2	a	a	а .	a	5 1/2-6
96	96 1/2	96-96 1/2	96	96-961/2	96	97-981/2	97	Los Angeles	92-921/2	92-921/2	a	a	8	a	5 1/2-6.6
96	971/2	981/2	98	99	98 1/2	991/2	99	Newark	96	95	96 1/2	95 1/2	97	96 1/2	5 1/2
96	98	99	99	99	99	99	99	New York	97 f	97 f	97 f	97 f	97 f	97 f	5 1/2-5 3/4
96	96 1/2	961/2-97	951/2-96	97	96	971/2	96 1/2	Okla City	92-921/2	a	92-921/2	а	92-921/2	a	5 3/4
96	971/2	98½-par	98½-par	98½-par	98½-par	98½-par	98½-par	Philadelphia	8	а	8	a	a	a	51/4-51/2
96	96 1/2	951/2-96	951/2-96	951/2-96	951/2-96	a	a	San Fran	91 1/2	91 1/2	а	a	а	a	53/4-7.2
96	97	95-98 ^b	95-97b	96-98 ^b	95-98	96-98b	96-98b	St Louis	В	8,	В	8.	a	a	5 3/4-6
96	971/2	98 1/2	98	98 1/2	98	99 1/2	99	Wash, DC	94	931/2	95 1/2	95	95 1/2	95	51/2

*3% down of first \$13,500; 15% of next \$2,500; 30% of balance.

SOURCES: Atlanta, Robert Tharpe, pres, Tharpe & Brooks Inc; Boston, Robert M. Morgan, vice pres, Boston Five Cents Savings Bank; Chicago, Murray Wolbach Jr, vice pres, Draper & Kramer Inc; Cleveland, William T. Doyle, vice pres, Jay F. Zook Inc; Allen C. Bradley, asst vice pres, Mortgage Investments Co; Detroit, Harold Finney, exec vice pres, Citizens Mortgage Corp; Houston, Donald McGregor, exec vice pres, T. J. Bettes Co; Jackson-ville, John D. Yates, vice pres, Stockton, Whatley, Davin & Co; Los Angeles, Robert E. Morgan, exec vice pres, The Colwell Co; Newark, William F. Haas, vice pres, Franklin Capital Corp; New York, John Halperin, pres, J. Halperin & Co; Oklahoma City, M. F. Haight, first vice pres, American Mortgage & Investment Co; Philadelphia, Robert S. Irving, exec vice pres, W. A. Clarke Mortgage Co; St. Louis, W. C. Rainford, pres, Mercantile Mortgage Co; San Francisco, Maurice V. O'Hearn, vice pres, Bankers Mortgage Co of Calif; Washington, DC, Hector Hollister, exec vice pres, Frederick W Berens Inc.

Immediate covers loans for delivery up to 3 months; future covers loans for delivery in 3 to 12 months.
Quotations refer to prices in metropolitan areas; discounts may run slightly

Quotations refer to prices in metropolitan areas; discounts may run slightly higher in surrounding small towns or rural zones.

Quotations refer to houses of typical average local quality with respect to design, location and construction.

Footnotest a—no activity, b—very limited market, c—very limited demand. d—most at 5¾. e—5½ dominating, f—includes construction loans, g—some 5% and some 5¼%. FNMA pays 98 for FHA 5¼% mortgages of \$13,500 or less after ¾ point purchasing and marketing fee and ¾ commitment fee. x—FNMA pays ½ point more for loans with 10% down or more, y—FNMA net price after ½ point purchase and marketing fee, plus 2% stock purchase figured at sale for 50¢ on the \$1. z—price after ¾ point purchasing and marketing fee, plus ¾ point commitment fee; applies only to VA mortgages of \$13,500 or less.

NEW YORK WHOLESALE MORTGAGE MARKET

FHA 51/4s

Immediates: 95-96

Futures: 95-96

Immediates: 91-911/2 Futures: 901/2-911/2

VA and FHA 41/2s

Immediates: no activity Futures: no activity

Prices for out-of-state loans, as reported the week ending Dec 12 by Thomas P. Coogan, president, Housing Securities Inc.

Note: prices are net to originating mortgage broker (not necessarily net to builder) and usually include concessions made by servicing agencies.

FNMA STOCK

Month's Month's Dec 10 Nov 13 low high 583/4 57 Asked 603/4

Quotations supplied by C. F. Childs & Co.



Make sure your homes feature genuine Orangeburg quality. It helps make the sale easier. Means more satisfied customers. So look for the Silver Band to be sure you're getting genuine Orangeburg: Root-Proof Pipe for sewer lines from house to street; for run-offs from downspouts... Perforated Pipe for foundation drains, septic tank filter beds. Over 300 million feet in use from coast to coast. It's the Brand your customers know. Write for "Tips for Installing," Dept. H-19, Orangeburg Manufacturing Co., Orangeburg, N. Y. or Newark, Calif.

ORANGEBURG MANUFACTURING CO.

A Division of The Flintkote Company Manufacturers of the Broadest Line of Building Materials in America

Genuine ORANGEBURG Root-Proof Pipe and Fittings

Announcing a new line that helps you build better homes for less money!

HOME ALUMINUM SIDING

SEE IT AT THE NAHB SHOW

4 important questions - and 4 straight answers!

1. Will I save on material cost?

Yes. In most parts of the country, Nu-Home Aluminum Siding can be installed at lower cost than good quality wood siding with three coats of paint.

2. Will I save time?

Yes. Nu-Home Aluminum Siding with its baked-on vinyl finish can be applied as quickly as wood siding. You save the time involved in painting.

3. Will my home have more value—more sales appeal? Yes. Home owners want carefree living offered by Nu-Home Siding. No painting, no maintenance worries for generations.

4. Is it a good product?

The best. We use only the highest quality aluminum made to our specifications. Our vinyl coating is formulated exclusively for us by the Sherwin-Williams Co. using as a basic ingredient Geon polyvinyl resins by the B. F. Goodrich Chemical Company. And, we do our own manufacturing in our modern plant, using techniques, skills and craftsmanship that are unusual in the industry. We've been manufacturing top quality aluminum siding, awnings, wall tile and combination doors since 1947.

Compare these features and you'll see why Nu-Home Siding is best

- Siding panels and accessories bonderized and vinyl-coated front and back
- Elongated nail slots and pre-notched panel ends for easy installation
- Concealed weep holes eliminate moisture problems
- Exclusive tension lock installation
- Strong interlocking outside corner pieces
- 12' 6" length panels
- · Available in white and five beautiful pastel colors
- 10 year factory warranty on finish
- Meets FHA requirements
- · Sold only to building supply firms and builders

For complete information

See us in booth 897 in the Coliseum during the NAHB Show. If you do not plan to attend, mail the coupon below, and we'll rush complete information to you.

HASTINGS ALUMINUM PRODUCTS, INC.

Hastings, Michigan

Hastings Aluminum Products, Inc. manufactures aluminum siding for Lumaside, Inc.
Milwaukee. Wisconsin for sale in certain midwestern and southwestern states.



Booth 897 Chicago Coliseum

Mall this coupon today!
For complete information on NU-HOME Aluminum Siding.
Hastings Aluminum Products, Inc. Hastings 9, Michigan

NAME			the second of th
ADDRESS_	and the second second second second		
CITY		ZONE_	_STATE
am a:			

NRLDA convention hears cries of profitless prosperity

A price-cutting binge, to keep their yards busy during the recession's lean months, has left lumbermen with a king-size hangover: practically no profit in spite of improving business. An average 2-3% return on investment is par, according to big and little lumber dealers who trooped to Chicago for NRLDA's 5th annual exposition.

"This business has become so competitive that nobody can get a fair price," cries T. Merrit Ludwig of Reading, Pa. "Not the manufacturer, not the supplier, not the builder."

"We're just breaking even on the same amount of business we used to make lots of money on 10 years ago," cries another dealer.

"You might do better putting your money in government bonds, if you could get it out of the business," observes Don Butler of St Paul, Minn.

Few lumbermen can get the money out and not many want to. With most, theirs is a family business. They want to cure the headache, not kill the patient. Adding to the twinges are two major items:

- 1. Prefabbers are stealing their new house market. Many experts figure prefabbers' better lines of mortgage financing have been their No. 1 competitive weapon. But convention-going lumbermen were much more voluble about prefabbers' slick merchandising.
- 2. Cash and carry lumber yards are stealing their other customers. Cash and carry yards operate like a discount house in any other line with huge inventory, no services, no credit or sales problems. So they offer materials at rock-bottom prices. Conventional lumbermen, with their multiple, personalized customer services—sequence delivery to help with financing, planmaking and materials takeoffs—and consequent high overhead—can't match them.

Perils of diversity

For the remedy-seeking lumbermen, plenty of nostrums were recommended at Chicago. These ranged from getting into the building business more deeply to opening shelter supermarkets and selling everything to do with the home.

But the remedies all added up to one thing, in the words of Robert Blackstock of Seattle, son and partner of new NRLDA president H. W. Blackstock:

"The old 'bricks and sticks' idea of the lumberman is changing. He is having to package houses, home improvement, industrial services. People want one-stop service today—financing, materials, everything.

Sell, sell, sell

Lectured from all sides, sometimes gently, sometimes bluntly, about what they should do, the lumbermen heard one theme over and over; sell

Keynoter Melvin H. Baker, chairman of National Gypsum (and former lumberman), warned that excess plant capacities for building materials plus competition from new materials confront both producers and dealers with threats to their profits. "New producers and excess capacities . . . may create new trends in distribution," he said. "Many substitute materials will seek entry into the building market, particularly in home construction. Substitute materials are frequently marketed through miscellaneous channels . . . Let me make a friendly warning—time is of the essence. We must get organized for better selling."

He accused manufacturers of "general lack of good salesmanship," explaining: "We have emphasized what to sell rather than how."

How should it be done? Said Baker: "Through better selling, we can hope to create more interest in home ownership... Because the home is basic in the American way of life, leadership for promoting better homes has been sponsored through an extensive display campaign recently by LIFE magazine and similar campaigns by farsighted material producers. Presently, NAHB combined with certain producers of materials and equipment have organized a national committee to formulate a program that would further stimulate home ownership. I am happy to be a part of this powerful group."

Share the blame

Part of the blame for not selling belongs to dealers, Baker contended. He said:

"Manufacturers spend millions for production facilities. They send thousands of salesmen into the field to move the products. The dealer and manufacturers spend additional millions on advertising and sales promotion to attract customers into your stores. But here, at the most critical point, the customer is often deserted and left to sell himself."

Forecast Walter Hoadley, treasurer and chief economist for Armstrong Cork Co: "A 5% gain in business next year will be par for the course nationally. If the national economy is improving its efficiency by 5%, a guy who is doing everything the same way he was a year ago is that much out."

It was certain that the lumberman couldn't hope to keep competing on price alone. He'd already shaved his profit to a nubbin.

"Our contractors know darn well that we all have 100% markup," wisecracked Fred Dill of Carmel, N. Y. "They know because we'll cut the price darn near 100% just to get their business."

The big cash and carry yards, offering nothing but price, have outclassed the full service yard in ability to "make a deal." Unlisted on the program, they were a top item of talk just the same. "I'd estimate that 95% of the talk here is about cash and carry," said Ludwig. "Everybody's interested in it."

"It's a new phenomenon," said Lumberman Thompson, describing the operation of one midwest chain that now covers five states and may expand. "They may have \$500,000 in capital investment, \$1 million in inventory, and they'll usually be spotted outside urban areas, in a location where a market survey has shown the place can cover a 50-75 mi radius, and do \$1-2 million a year gross."

"There's nothing new about cash and carry," says H. R. "Cotton" Northup, NRLDA executive vice president. "We've had it for years." The new spurt of cash and carry activity, he says, "only scares the guy who sits on his fanny and doesn't want to do anything about it."

Merchandising service as well as materials, "selling the package" whether it was a whole house or a set of kitchen cabinets is the answer given by most dealers who've successfully met the cash and carry trends.

Package for profit

"More profit comes from having more control of the work," says Ludwig, who packages home sales—from attracting the prospects to developing land for builders to build on, and including sales of home components. Like many larger dealers, Ludwig is skeptical about the home improvement market which, although yielding the highest markup, also costs the most to sell.

"Fixup is a tender trap," says Lumberman Thompson. "It takes an entirely different kind of approach. A man needs to know his market, his resources and his competition. It could be disastrous to plunge blindly."

Supermarket sales

For the future, at least one authority felt it didn't matter—they would all end up the same anyway. "Within 10 years, the lumbermen you see walking around here will be out of business," said James M. Newman, staffer for Merchandising Expert Joseph Guillozet. "We're telling them that. We're telling them all that will be left are huge material supply stores, and stores selling everything to do with shelter."

Guillozet and his staff held six meetings a day at the four-day convention, each drawing between 100 and 200 lumbermen who heard ways and means of setting up housing supermarts, selling everything from latchkeys to split-level homes. How did lumbermen react?

"A few are angry and a few are bored, but most of them are interested, and want to go into the thing further," says Newman.

Raymond Harrell, LDRC executive vicepresident, announced that the organization could now offer an aluminum emblem to be applied to components built by franchised dealers, which certifies the component in accord with FHA special engineering bulletin

Lumber dealer's show grows toward big time

In only four years, NRLDA's Building Products Exposition has grown from the bush leagues of the home show to begin rivaling

NAHB's huge annual affair.

Figures for '58 (210 exhibitors, 9,304 attendance) show the lumbermen have a long way to go to catch the builders (in '57, 14th annual NAHB show had 738 exhibitors, more than 30,000 attendance). They also show the lumbermen are still growing. There were 202 exhibitors, only 7,300 registered at the NRDLA show in '57. What they don't show: exhibitors are beginning to switch from the NAHB to NRLDA to unveil their new lines for the coming year.

for the coming year.

"I don't want to start any fights," says pleased Martin Dwyer, NRLDA's exposition director, "but 15 manufacturers showed their '59 lines at our show [in Nov] instead of waiting for the builders [in Jan]."

Only noticeable switch in composition of

Only noticeable switch in composition of exhibitors, according to Dwyer, was the near doubling of the number of kitchen manufacturers showing their wares—15 against only eight in '57.

HOUSE & HOME

#226, will be accepted by FHA as field inspection.

Harrell said that a year and a half ago only 30-40% of LuReCo dealers were actually manufacturing homes. "A lot more have begun in '58 who haven't done a thing since '54," he said. Between September '57 and September '58, 128 new dealers were added upping the total to 1,360.

Five new homes commissioned by the DFPA were added to the LuReCo lineup to supplement 10 added last year. Houses, designed to sell for around \$12-13,000, are being test built in Illinois, Virginia, New York and Washington to check costs. "In Seattle they are selling for \$13,700," said Harrell.
"We feel," he continued, "that the educa-

tional job on the technical side of LuReCowhat it is and how it works-has been consummated. They're easy to put up. Any idiot can put them up. Now we're switching to showing ways of selling them."

Sell reliability, service says new NRLDA chief

H. W. (for Herbert Weaver) Blackstock, 60, new president of NRLDA, is a man who talks enthusiastically about improving merchandising techniques in the lumber industry.

'We've got to improve our selling techniques and let the public know we are the place to go if they want building materials," he says. "The lumber dealer is generally an outstanding citizen in his community—a solid businessman and a substantial citizen. Why

should a customer fool with fly-by-nights when he can go to a man like that?"

Blackstock—powerfully built, slow moving, soft-spoken — fits his own description of the ideal lumber dealer. He has served as president of the West Seattle Chamber of Commerce, vice president of a Seattle bank, as well as in BLACKSTOCK



a long list of lumber association posts. He was first vice president of NRLDA in 1958.

Son of a lumberman in Stockville, N.C. he attended Weaver College in that state, then the University of Washington before joining two of his brothers in the lumber business in Seattle in 1917. He is president of the big H. W. Blackstock Lumber Co.

Blackstock expects to travel some 50,000 miles this year as NRLDA president, spend 40% of his business time at the job.

Lumbermen make moves to reorganize assn

NRLDA has started a major shakeup, prodded by a \$30,000 management report which says it is badly organized, fails to provide many services that its members want and should get. The bitter prescription written by consultants Cresap, McCormick & Paget, suggested changes ranging from a new name (National Lumber and Building Material Dealers Assn) to higher dues. It brought moves by NRLDA's board to:

1. Hire a specialist to help its federated associations build membership (goal: 5,000 new dealers).

ANUARY 1959

- 2. Hire two more specialists to help dealers with market and operations problems as soon as funds are available.
- 3. Hire one or more staff vice presidents, presumably to provide a successor to H. R. 'Cotton" Northup, 63, NRLDA's esteemed executive vice president, nearing retirement.
- 4. Broaden policy control by including all federated association presidents on NRLDA's board ex officio; provide for election, rather than appointment, of regular board members from federated associations.

MATERIALS BRIEFS

Prices: freeze in aluminum

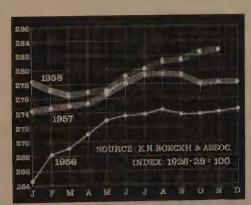
Cement and aluminum producers are going in for price freezing.

- Alcoa and Kaiser are guaranteeing firm prices on all products through the first half of '59. An Alcoa spokesman said the company moved to prevent "chaos" in the industry after Aluminium Ltd Sales, quickly followed by Reynolds Metals Co, announced abolition of the industry's customary 60-day price protection policy—but promised to hold the line on all orders placed by Jan 1 and shipped by mid-'59.
- Cement makers will hold their '59 prices steady-and for the most part at '58 levels. Only exceptions: some producers in the Northeast and West Coast, who raised prices 15¢/bbl (their first boost since April '57, while most others went up Jan 1 '58).

Paint: a new sales woe

Paint makers are turning out new, specialized products so fast that they have trouble telling architects and builders about them before they are obsolete. Francis Scofield, scientific director of the National Paint, Varnish & Lacquer Assn, says the situation is causing a terrific sales problem.

"Eighty-five per cent of the sales products the paint industry is now making were not on the market 10 years ago," he says. The industry has responded valiantly to a growing demand for more specialized, less general purpose coatings, but unfortunately few know how to best use the products because "almost as soon as properly descriptive material can be prepared, it is obsolete." Scofield says the industry is still looking for the right solution.



RESIDENTIAL BUILDING COSTS climbed 0.2 point in November to 282.6 on Boeckh's index. The slight rise was due to higher labor rates in a few cities. Reports Col E. H. Boeckh: "Materials are holding pretty fast . . . Lumber is stationary.'

Major problem: NRLDA's dues structure (\$185,000 in '57) can't support the cost of the new services (estimated at \$45-60,000). Suggested solution (not yet adopted): raise dues to provide \$245,000 a year, meanwhile finance new services from "extraordinary" income (exposition profits, for example).

Warns the report: "open and secret" warfare between national and federated associations must stop. More dealers must give more time to association affairs if the organization is to grow.



LUMBER MANUFACTURERS elected Robert M. Ingram, Aberdeen, Wash. (c) as president. N. Floyd McGowin, Chapman, Ala. (r) board chairman and Thomas J. McHugh, Boston (1) first vice president.

NLMA members expect a 3.8% gain in production and sales in '59, plan to stimulate acceptance of wood through a National Wood Promotion Committee and a National Wood Council.

IRS rules rebates taxable

Internal Revenue Service has tightened up its rules on advertising rebates appliance makers allow their dealers.

Now, all such allowances must be included in the price base on which excise taxes are assessed.

Costs: another 5% forecast

Building costs which have risen 152% since 1941 will go up another 5% this year, predicts Myron Matthews of Dow Real Estate Valuation Calculator. Labor is the chief push on costs (excluding land), he adds. (Builders agree.) In the last six months, labor costs were up in 121 cities, unchanged in only 21, materials points to builders were unchanged in 80 cities, down in 21 and up slightly in 41.



MATERIALS PRICES dropped 0.1 point in November-to 132 on the BLS' index. This left the index 1.5% higher than in November '57. The dip was caused by lower lumber and wood products prices-off from 120.8 in October to 120.0. All other items held at October levels.

New line of Westinghouse saves space...provides

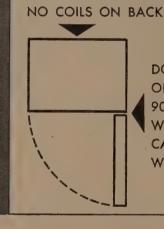


REFRIGERATOR-FREEZERS BUILD-IN EASILY. JUST SLIDE INTO PLACE AND INSTALL TRIM KIT

New Westinghouse built-in models have no coils on the back. Instead, operating mechanism is located beneath cabinet. Unique concealed hinge permits doors to open within cabinet width at 90°. Available with bottom-located freezer (shown) or top-mounted freezer, they install quickly ... add more appeal to kitchens. Westinghouse also makes a horizontal refrigeratorfreezer that builds in or stacks on cabinets. And here's good news! Any refrigerator-freezer in the Westinghouse line can now be built-in using accessory trim and grille kits. You'll want further information on this big advantage.

14 CU, FT. BUILT-IN HAS SEPARATE 161 LB. FREEZER

Meat stays fresh for 7 days without freezing, thanks to the exclusive Westinghouse Cold Injector that keeps foods better . . . chills them faster. This is food storage at its best. Color availability includes Mint Aqua, Frosting Pink, Lemon Yellow, Sugar White, Coppertan, Coppertex, and Brushed Chrome. Exterior Choose 'n Change Panels come in 5 colors plus 2 wood grains.



HOME PROSPECTS' MOST WANTED CLEANUP TEAM

Only Westinghouse built-in dishwashers have the amazing Hot Water Booster that guarantees 140° hot wash and rinse water for spotless, sanitary-clean dishes. Convenient frontopening, top-loading design offers extra-large capacity . . . service for 6 plus pots and pans, or service for 10. Choose from a wide selection of front panel colors and finishes.

Powerful, cushion-quiet Westinghouse Food Waste Disposer grinds food waste quickly and efficiently. Built-in Thermoguard® cuts off current should overload or jamming occur. 1/3 hp. motor. Takes little space and connects easily to dishwasher.



DOOR **OPENS**

WITHIN

WIDTH

CABINET

90°

Built-in Appliances more attractive kitchens!



DELUXE OVEN STACKS OR BUILDS IN ... PLATFORM HAS REMOTE CONTROLS

The latest in built-in oven design, this deluxe model has convenient *side-mounted* controls and lift-off door. Both built-in and stack-on models fit 30" cabinet. Features include exclusive Westinghouse Serv-Temp Roast Guard, Built-in Rotisserie and Miracle-Sealed Oven. Also available in standard models without Roast Guard and

Rotisserie. In Mint Aqua, Frosting Pink, Lemon Yellow, Coppertan, Coppertex, Brushed Chrome. Where space is limited, use this compact square platform with 4 fast Corox® units. Remote Control Panel has Rotary Controls with 1001 heats. Check your distributor first for availability of this new oven and platform.

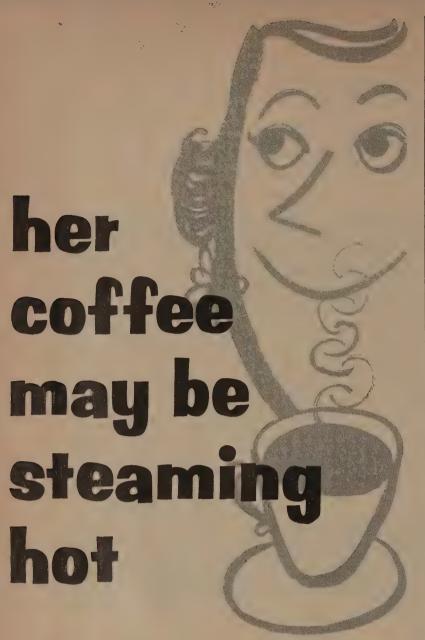


NEW VERSION OF FAMOUS 25" LAUNDRY

Westinghouse Deluxe Space-Mates, matching Laundromat® Automatic Washer and Clothes Dryer, provide a complete home laundry in 25 inches when vertically installed. They also build-in undercounter or side-by-side, waist-high. Both units will handle a 9 lb. load of clothes. Laundromat has famous Revolving Agitator which washes cleaner, rinses better and cleans itself. Dryer operates on 115 or 230 volts. In Mint Aqua, Frosting Pink, Lemon Yellow and Sugar White. Standard models also available.

See your Westinghouse Distributor for further information on the complete lines of Westinghouse built-in appliances, wood cabinets and steel cabinets. Or, write to Westinghouse Electric Corp., Major Appliance Division, Contract Sales Dept., Mansfield, Ohio.

YOU CAN BE SURE ... IF IT'S Westinghouse WATCH "WESTINGHOUSE LUCILLE BALL-DESI ARNAZ SHOWS" CBS-TV MONDAYS BOOK STORE TO SHOW ST



...but not her new home

When guests drop in, it's not the refreshment that counts, it's the atmosphere and surroundings. And her new home provides year 'round "shade tree" comfort whatever the temperature outside.

Happy as a clam? YES, MA'AM! You built the house, and she's happy with *you*. Because your heating contractor installed White-Rodgers Controls.

Temperature controls are our business. We engineer and manufacture quality controls for heating, air conditioning and refrigeration equipment. Until your house is sold, our controls are an intangible sales feature. Then it's amazing how *real* the comfort becomes... and the appreciation. You'll find White-Rodgers Controls do a remarkable job of keeping the sale closed and enhancing your reputation as a builder.

For a lifetime of good building ... specify White-Rodgers temperature controls ... with a lifetime of solid comfort

WHITE RODGERS

St. Louis 6, Missouri
Toronto 8, Canada

Makers of FASHION and
PUSHBUTTON World's
Most Modern Thermostats



CANADA:

Lenders, builders ponder secondary mortgage market, study US as model

Canada's mortgage lenders and builders have decided they need some type of secondary mortgage market and a mortgage banking industry.

Reason: the nation's antiquated system under which lenders originate all their own loans and service them directly no longer meets the needs of a fast-growing population. It precludes other mortgage investment since no one else is originating loans.

Sixty lenders, builders and real estate brokers met for a one-day conference called by the Natl House Builders Assn in Toronto last month to discuss what should be done.

They heard Washington Mortgage Banker George DeFranceaux, president of Frederick W. Berens Inc, outline the US mortgage banking and secondary market systems. The contrasts were many. There are no discounts on NHA loans. There is virtually no buying and selling.

Some of the proposals made at the session: 1) a new secondary market like the US' Fanny May; 2) some form of mortgage participation shares; 3) central mortgage clearing houses or warehousing facilities and 4) greater attraction to foreign capital to help finance real estate development. (Fluctuating premiums on the Canadian dollar and a 15% withholding tax discourage US investors.)

Builders ponder plan to take in six groups

The president of the Natl House Builders Assn is ready to spring a plan for taking six other kinds of building trade professionals under the builders' wing.

Maurice Joubert says NHBA should become the focal point for six affiliated institutes "where we could meet to talk housing in its broadest aspects." He adds: "We do not want to take control over the industry, but we think NHBA... is a natural central point for a group of six associations to represent all industry interests." The six:

1) land development (an Urban Development Institute has already been set up), 2) manufacturing and supply, 3) finance, 4) design, 5) government ("Too many people think first of government when they talk housing," says Joubert) and 6) sales and consumer contact. He'll present his plant to NHBA's annual convention in Montreal this month.

TAXES:

IRS ruling threatens builders, court told

If you sell houses on ground leases, you'll want to keep an eye on the outcome of a case before the US Tax Court in Washington, DC.

Welsh Homes Inc of Baltimore (where ground rent has been common for decades) is fighting a government tax claim which its attorney, Mason Kassell, says "would bankrupt every homebuilder in the Baltimore area." Here's how it developed:

For years, Maryland builders had been paying income tax on the difference between what land cost them to buy and its capitalized value (at 6%) under a ground lease. Thus, if a builder sold a house for \$13,000 (of which \$1,000 was profit) subject to \$108 a year ground rent, he reported not only the \$1,000 profit as income, but also the difference between \$1,800 (the ground rent capitalized at 6%) and what the land cost. So if the lot had cost him \$800, he would pay tax on \$2,000 profit.

But about five years ago, the fourth US Circuit Court of Appeals held that since the builder didn't actually get paid for the lot and, in fact, kept title to it, he owed no tax at all on the capitalized rent.

Internal Revenue men refused to accept the verdict. Now, they contend that if no tax is due on the leased land, the house, too, must be leased and so a builder cannot offset the \$12,000 cost of construction against his \$13,000 proceeds from its sale. On this basis, it claims \$6,976,000 back taxes from the Welsh firm—a company which Lawyer Kassell says is worth only about \$2.5 million.

The nearly \$7 million covers some 1,000 homes built in 1952, '53 and '54. Welsh paid income tax on the capitalized value of the ground leases for the 1952 units. But, on the basis of the appeals ruling, it refused to pay anything for the leases the next two years.

Actually, Kassell points out, the government stands to lose little. Reason is that Maryland law empowers home owners, after they have paid ground rent for only five years on a 99 year lease, to take title to their lot by paying the land owner the capitalized value of the ground rent. About half of Baltimore housebuyers do so. If a builder doesn't pay tax on profit from a ground lease the year he sells a house, he must do so then, anyway. NEWS continued on p 701



the warmth of natural woods... with folding door convenience

IEW LOUVER-FOLD/DOOR\$

PATENTS PENDING

...automatically louver as they open or close OUVER-FOLD DOORS AT THE 1959 NAHB SHOW — CONRAD HILTON — BOOTHS 380-381

e sleek solidity of select wood heer louvers engineered to erate flawlessly in a mechanism unique design gives Louvered Doors a touch of elegance and in no other door. Inctional features gained with liver-Fold's non-connected wers make possible striking applications in residential commercial use.

OTHER SIDE

	F K - F	OLD DOORS I			
LUUI	Page 1	OFD DOOLO			

Please RUSH me complete information on new natural wood Louver-Fold Doors!

Firm Name
Address

City_____Zone___State

We are (close short any posite agree)

We are: (please check appropriate square)

☐ Builders ☐ Architects ☐ Distributors

Other____



the NEW door

with a view...to more home sales!

Your prospective buyers will be *instantly* attracted by the warm grace of Louver-Fold Doors. They'll recognize the built-in quality of select wood veneers in Louver-Fold's exclusive "Air Foil" louvers. And they'll immediately appreciate the many unique operating features offered only by the new Louver-Fold Door. Non-connected louvers close securely for privacy, sound-deadening insulation and perfectly paneled appearance. When slightly opened, Louver-Fold's 83/8" louvers *angle* to allow ventilation, a major advantage where air circulation for heating or air conditioning must be considered.

Exclusive "louver view" allows see-through visibility in one direction, blocks visibility in the other. May be ordered in either right or left louver view. Ideal for use as room dividers, closures, movable louvered screens.

Easy overhead installation, no floor track necessary. All hardware of rich, golden anodized aluminum with self-lubricating nylon bushings.

Yes, you'll open the door to new sales when you install Louver-Fold Doors... to give your buyers more useable space and more folding door features than ever before.



Louver-Fold provides vertical louvered screen.



Louver-Fold permits light and ventilation, yet gives complete privacy.



Louver-Fold stacks compactly, does not "spring back" from wall.

NATIONWIDE PUBLICITY

Leading publications across the nation have featured this new approach to folding door design. Thousands of inquiries from prospective home buyers have been processed—an indication of the immediate consumer acceptance of this new door!

FIRST CLASS
PERMIT No. 1456
Houston, Texas



Mail Card Today!

DISTRIBUTORS: Write for data on territories still available.

Louver-Fold Doors are manufactured only

Consolidated General Products In

Executive Offices and Main Factory: Houston 8, Texas

Branches at: Dallas, New Orleans, Atlan Waukesha, Tampa, Chicago, New

Also Manufacturers of: Veni-Flex Wov Wood Folding Doors, Consolite Doub Dome Skylights, Conso Windmaster Fo Rexalum Aluminum Elapboard Siding

Circle No. 50 for further inform

BUSINESS REPLY CARD

NO POSTAGE STAMP NECESSARY IF MAILED WITHIN THE UNITED STATES

POSTAGE WILL BE PAID BY -

CONSOLIDATED GENERAL PRODUCTS, INC.
P. O. BOX 7425
HOUSTON 8, TEXAS

PI

of the lift year

HON



"G-E REMOTE-CONTROL WIRING IS LIKE HAVING AN EXTRA SALESMAN IN MY MODEL HOME!"

... Mr. Kenneth W. Flower, Builder, Terwood Park Homes, Upper Moreland Township, Pennsylvania

"Extras sell a home today", says Mr. Flower. "People have so many homes to choose from, they take the one with eyecatching conveniences, such as our modern kitchen, built-in 'Hi-fi' and G-E remote-control system . . . features they don't have in their old homes. It's paid off in Terwood Park, where we sold the first 20 houses out of 65 in ten weeks . . . at a time when the competitive market around Philadelphia was slow.

"G-E remote-control wiring, with convenient multi-point switching, is worth many times its cost as a house-selling feature. People see it and try it right away. The bedroom master selector switch that 'floods the house quickly with light' rates high with the ladies out in this wooded country. We've used G-E remote-control before, and plan it for our next project."

Costs only \$78 more than conventional wiring

"I put G-E remote-control in Terwood Park for only \$78 more per house than conventional wiring", says Harry G. Hey, Ambler, Pa., electrical contractor. "That includes a nine-position selector switch in the master bedroom and 24 switches throughout the house, controlling inside and outside lights. You can't beat the General Electric remote-control system!"

Ask your electrical contractor or General Electric distributor to show how you can install this house-selling feature at reasonable cost. OR: Write for free literature on G-E remote-control wiring, to General Electric Company, Wiring Device Department, Providence 7, R. I.

Mr. Flower stands in front of the Terwood Park model home, justifiably proud of his split-level, 3-bedroom design. "Dream kitchen", paneled den, 2½ baths and two-car garage provide "a lot of good living for \$21,000 to \$23,000."



"G-E switches are good-looking", says Flower.
"People like their appearance as well as the convenience of remote-control switching."

Electrical contractor Harry Hey (bottom left), is a great booster for the safety features of G-E low-voltage control circuits. "I've installed a thousand of these systems, with good results every time", says Mr. Hey.



Progress Is Our Most Important Product

GENERAL 6



ELECTRIC

Chicago's struggle to save a high-IQ square mile

Will urban renewal work in a neighborhood undergoing rapid racial change?

Chicago is betting \$9.2 million of its own money that it will. And the city has just persuaded the federal government to earmark \$28.5 million* for the biggest project of its kind the nation has yet seen: a five-year surgery to slice out 20% of a blight-infected 1.3 sq mi area fringing the University of Chicago in hopes of saving the rest.

If the operation succeeds, it should offer a pattern of treatment for a score of major urban neighborhoods suffering similar ills. Already, successes and failures of the area, known as Hyde Park-Kenwood, have shown many another slum-threatened neighborhood how to overcome profiteering slumlords, corrupt or indifferent officials, legal red tape. It was the birthplace of the neighborhood block group—a tool so vital in fighting blight via rehabilitation and conservation that the idea is becoming national doctrine. It represents the first major effort by a university to mobilize renewal against a collar of slums threatening to envelop its multi-million dollar plant and convert its residential environs into the kind of neighborhood where professors will not live. At least 20 other schools face the same problem. Working toward the same goals, the university and the community around it have developed some of the nation's sharpest slum-fighting methods.

Hyde Park-Kenwood is far from non-controversial. It has refused to sidestep the relation between race problems and blight, at the same time remaining steadfastly interracial in its approach. It is the first area where renewal plans have drawn the heaviest artillery of the Catholic Church in an effort first to block, then amend them. A lot more than money—in fact, whole philosophies of urban renewal—ride on the outcome.

The plan opens a huge market for the private housing industry. It assumes that public funds, used against the worst blight in the neighborhood, will be matched with \$30 million by owners of the remaining 80%—goaded by the law if necessary—to remove blight-inviting conditions. And, that the two will make a neighborhood so pleasant to live in that its express-train shift from middle class to poor residency will be stopped.

Pattern for future

If Hyde Park-Kenwood is successful, it should spark a huge amount of rehabilitation work across the nation in old city neighborhoods—work housing contractors can tap if they try. Its value as a demonstration is far greater than its own giant dollar scope.

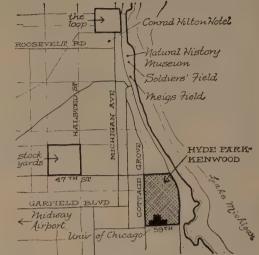
And it will prove the ideas of the men who fought to write the whole concept of urban renewal into the Housing Act of 1954—the concept that the federal government should, as HHFAdministrator Cole says, "help those who help themselves."

*Chicago qualified for 75% federal aid in Hyde Park-Kenwood by agreeing to pay all administrative costs of program, estimated at an extra \$1 million or more. What does a neighborhood like Hyde Park-Kenwood have to do to set the stage for a \$30 million rehabilitation market? Here's what this community has done:

- 1. Recognized the threat of blight at the grass-roots level and organized to fight it through volunteer effort.
- 2. Mobilized institutions in the area to add their weight to the fight.
- 3. Campaigned with unique effectiveness to nudge inert city officials into enforcing existing codes and to get new laws to provide new slum-fighting tools.
- **4.** Conducted a community-wide self-diagnosis and planned carefully and well on the basis of its findings.

Specifically, the plan in Hyde Park calls for demolishing relatively few buildings (600 out of 3,077). Some 105 acres thus cleared will be redeveloped to reduce population density, provide more parks, school space, parking and other amenities. Meanwhile, vigorous enforcement of the city's building and housing laws plus more demolition if needed, will bring remaining structures up to standard.

What gives the plan a prospect of success is the community's monumental battle to get



RENEWAL AREA (lower right) was once one of Chicago's best neighborhoods, still contains many fine old homes. Stretching west from Lake Michigan to Cottage Grove Ave, it abounds in parks, trees, schools, museums, is only 15 min from the Loop (upper right) by auto or train.

this far, which has generated a uniquely broad understanding of the problem. Big question: can the plan be carried out fast enough and thoroughly enough to keep most of the residents who may otherwise give up the fight and move out? (Planners say yes, though it will probably take longer than the five years allotted.) Big threat: tremendous pressure of low-income families (mostly Negro) who would replace them.

Hyde Park-Kenwood, (pop 75,000) edged on one side by the breezy, beach-fringed shore of Lake Michigan, on another by the University of Chicago, is collared on two others by the city's notorious South Side Negro ghetto, which includes some of the nation's most crowded slums. Residents of these slums, mostly recent arrivals from the rural South, attracted by industrial jobs and under constant pressure by still more

COUCHS

OLD HIGH-DENSITY apartment buildings ripe for blight are the kind of structures which are to be torn down, replaced with low-density housing or amenities like parks, schools, parking.





NEW LOW-DENSITY town houses already are replacing blighted structures in Hyde Park-Kenwood redevelopment. Built by Webb & Knapp Inc, the 2-3 bedroom houses sell for \$19,750-\$23,500, are typical of some residential redevelopment planned in the giant new urban renewal project. The latter also provides for 84 (and maybe more) public housing units, plus rehabilitation of the rest of the area

LIFE-Fritz Goro

newcomers, inevitably seek better housing. Some find it in University-oriented, interracial Hyde Park-Kenwood.

The problem was first recognized by a small group of Quakers led by Mrs Julia Abrahamson, who saw that unscrupulous landlords were exploiting the aching need for Negro housing, charging high rents that forced low-income tenants to crowd themselves far beyond the capacities of their apartments. In 1949, the group formed the Hyde Park-Kenwood Community Conference, organized the neighborhood by blocks to watch for and report illegal housing practices. At the same time they welcomed and attempted to interest new arrivals of all races in keeping up the neighborhood.

Two years later the university, alarmed at the decay which was spreading in spite of the grass-roots effort to stop it, stepped into the picture through formation of the South East Chicago Commission, headed by Executive Director Julian Levi. If Julia Abrahamson's conciliatory persuasion left inert officialdom still inert (e g over adequate street lighting, building code enforcement, police protection), or if slumlords proved unrepentant, Levi roared in with a frontal assault using the financial and political resources of the university.

Blunt, foghorn-voiced Levi and mild, trim Julia Abrahamson formed a team that won the respect, eventually the support of city officials. By 1956, when Mrs. Abrahamson left the conference (Apr '56, News) physical conversions of good apartments to cell-like slum units had been stopped dead and city services to the community were close to par. But conversion by use—moving three or four families into one apartment—had not. And the population makeup of the area continued to shift until it was far beyond the 20% many experts say is the "tipping point" beyond which a neighborhood "goes black."

Uneasy balance

Hyde Park-Kenwood has not yet tipped (though by Dec '58 it was 37% Negro), thanks to the strenuous efforts of the citizens and the University. But it was evident that stronger measures than those in use—which by then included "spot redevelopment" of some blight sores by the Chicago Land Clearance Commission—were needed. And the community was already at work on them. The result was the urban renewal plan, hammered out by SECC Planner Jack Meltzer—under a \$198,000 federal planning advance—for Chicago's Community Conservation Board. Close cooperation with planning committees of both community groups, and two long rounds of block-by-block meetings with residents produced a plan that had near-complete community support by the spring of '58.

But the fight was not over. While most major issues had been settled, and Chicago's mortgage bankers were (through the Chicago Assn of Commerce) pledging to lend the estimated \$30 million that property owners would need to carry out their part of the plan, a new and impressive adversary arose: the Catholic Archdiocese of Chicago (May, News).

Chicago (May, News).

Msgr John J. Egan, executive director of the Cardinal's committee on conservation appeared before the city council's public hearings on the plan, said the archdiocese could not approve the plan as it stood. In half-Catholic Chicago, the statement was a weighty one.

Egan argued that the plan (which calls for razing 6,000 dwelling units, eventual replacement with 2,000) would displace thousands into other crowded neighborhoods to create slum problems there.

Better than none

Retorted James V. Cunningham, executive director of HP-KCC and a Catholic (and friend of Father Egan) himself: "If there is no plan thousands upon thousands of families are going to flee the deterioration and move to other neighborhoods in far greater numbers than orderly relocation might bring." He warned that "if there is no plan, nearly all the 30,000 (dwelling units in the area) are going to be lost in time as standard units."

Underlying this debate and openly brought out by other critics was the problem of public housing and the race question. On one side, opposing any increase in the 84 public housing units planned, were those (chiefly the University) who feared low-income (and primarily Negro) housing would jeopardize availability of mortgage money for the vital private rehabilitation phase of the project. On the other, were those (including the Urban League, several churches, some aldermen and even Cunningham's group) who feared the project might price the neighborhood out of reach of most Negros, spoil its interracial character. Result: the plan was approved without change, but with a recommendation that public housing units be hiked to 200.

Is the plan subtly anti-Negro? Supporters say no. Some still say yes. (60% of families to be displaced are Negro.) Says University Anthropologist Sol Tax: "The chief point is that nothing at all could have been done if racial integration had not been an explicit and integral part of the plan."

NEWS continued on p 74

New Onan Diesel Electric Plant Cuts Power Costs in Half!

3,000-watt, A.C. output powers tools and lights for big crew

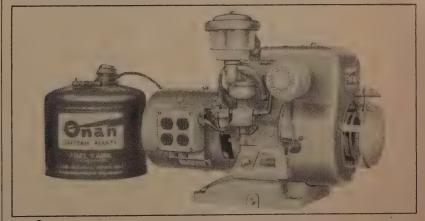
Lower fuel costs, less maintenance, and longer life of the new Onan Model 3DSL cut your costs per kilowatt to about half that of small gasoline-powered plants. Light in weight for a Diesel plant, the 3DSL on high speed trailer can be taken anywhere behind truck or car and is easily moved around on the job site.

This new small Diesel is powered by an Onan, single-cylinder, air-cooled full Diesel engine. Onan all-climate-insulated generator is directly connected to the engine assuring permanent alignment and smoother operation. Vacu-Flo cooling permits a fully enclosed installation where desirable. Wide choice of voltages. Standard equipment includes weather hood, mounted muffler, oil filter, highly efficient dry type air filter, four plug-ins, fuel tank package and geared crank. Trailer is optional.



Easy electric starting—Flick a switch on the 3DSL and you've got power. Glow plug, intake air heater and automatic decompression assure quick starts even in cold weather. 12-volt battery charging output keeps starting battery fully charged at all times.

New special contractors' model of the Onan 205AJ-1P; convenient separate gas tank . . . 2,500-watt A.C. output



Our most popular size plant for building contractors. Big enough to keep several men busy with electric saws, drills, lights and other equipment... but light in weight. Choice of voltages. Powered by a rugged, 4-cycle

Onan gasoline engine. Four plug-ins. Equipped with aluminum carrying frame, oil bath air cleaner, recoil starter, separate 5-gallon fuel tank with quick-detachable fuel line. Two-wheel dolly available.

Check your phone book for name of your Onan distributor or write for folder on contractor models—500 to 10,000 watts.

D. W. ONAN & SONS INC.



NEW! a smartly designed ... easy to install



ventilator Heater Light



See the complete line at the Builders Show • Space 440-441 Hotel Sherman

Removable junction box.

Inner box mounting bolts.

Plug in connections.

Removable duct sieeve connector.

Adjustable mounting flange.

-Exhaust port.

Install 60 watt

Heating element.

Wide grille

Exclusive snap-in

No. 622 Completely prewired switch recommended for most economical installation and efficient operation.

Alignment holes for mounting

Satin chrome

Ribbed milk glass diffuses light. —

Aluminum honeycomb grille. —

heat reflector.

bolts.

... the latest in the FASCO—Here is the combination unit that has exclusive features found on no other ventilator-light-heater, and everything is wrapped up in one smart package. 120 watts of recessed, soft, abundant illumination . . . efficient ventilation to keep the bathroom dry and odor free . . . plus the adequate gentle warmth of a heater to take the chill out of those crisp mornings.

HERE ARE SUME OF THE EXCLUSIVE FEATURES. Chrome grille frame - Two speed heater (high speed - both

Specifications

Model	Impeller Diameter	CFM	Element Wattage	Amps	вти	Shipping Weight
657C	434"	100	1000	10	3412	19 lbs.

heater and ventilator switch on; normal speed—heater switch only) • Satin chrome reflector—deflects all heat downward • Aluminum honeycomb heater grille—directs heat down • Bimetal motor automatically closes positive damper control directing air over heating element • Automatic reset circuit breaker

FASCO INDUSTRIES, INCORPORATED, North Union and Augusta, Rochester 2, New York

Please send me your new full-color, full-line catalog of Fasco range hoods and ventilators.

Name . Compan

Address

City

Zone

State

HH159

Houses really sell... when builders listen to women

Ralph Ochsman, of Community Builders, Inc., Sleepy Hollow Woods, Virginia, is one of 35 builders across the country who incorporated recommendations of women delegates to McCall's -sponsored Congress on Better Living in his new homes.

In all, these 35 builders erected 4,452 Congress Certified houses at a value of more than \$66,000,000 in 1958.

Mr. Ochsman's experience was typical. He ran a full-color page ad in the Washington Post on his Congress Certified Homes. "Fully 10,000 turned out on Saturday and Sunday," he reports.

"We sold twenty-one houses (\$1,000 deposits) and have many, many more contracts working."

In 1959, McCall's is expanding the Congress on Better Living Home Certification program to include both spring and fall issue promotions. All builders are eligible to submit their plans for Certification. For applications, write to: Director, Home Certification Program, McCall's Congress on Better Living, 230 Park Avenue, New York 17, N. Y.—or see a McCall's representative at Booth #852, the Coliseum, during the Home Builders' Show in Chicago.



McCALL'S, THE MAGAZINE OF TOGETHERNESS, CIRCULATION NOW MORE THAN 5,300,000

Census bombshell: rehabilitation ends most slum units, demolition puny

New evidence uncovered by the Census Bureau is about to explode a lot of widely accepted notions about blighted housing, slums and urban renewal.

If the government figures are right, the vast sums the federal government is pouring into slum removal through redevelopment and public housing may well come under sharp new attack. The Census Bureau says they only amount to a drop in the bucket in getting rid of blight. What does work, Census finds, is rehabilitation.

The explosive evidence has already been dropped before the nation's No. 1 shaper of housing policy, the Senate housing sub-

committee. It is in a report by Prof Reinhold Wolff and David Gillogly of the University of Miami for the subcommittee's study of mortgage finance needs for the anticipated housing boom of the late '60s. Their findings are based on hitherto unpublished figures from Census' 1956 National Housing Inven-



Cosmo Sileo

WOLFE

tory (Jan '57, News). Major items:

It is not true that there is a vast number of substandard housing units which need to be torn down.

Census figures show that fixup and rehabilitation have done "a marvelous job" of improving the US housing stock. Between 1950 and 1956, some 4½ million units were rehabilitated. Four-fifths of it involved addition of plumbing facilities; only one-fifth was repair of dilapidated structures. At the same time, only 1.4 million units fell into substandard shape. "The miracle of our age," says Wolff, "is that while our housing stock is ever on the increase, our substandard housing is not only diminishing in relative terms, but in actual numbers as well." Only 23.7% of US housing was sub-standard in 1956, vs 36.8% in 1950 and 49% in 1940.

CHANGES IN SUBSTANDARD HOUSING, 1950-1956

(1,000 umis)		
Decreases	inventory	
7,360	3,852	
	4 ## 0	
4,538	-4,538	
	+1,431	
-	+1,010	
	- 816	
	+ 292	
816	— 628	
1,038	— 603	
	,	

It is not true that a big volume of substandard units has already been demolished.

Reports Wolff: "Demolitions are a drop in the bucket. And unless the federal urban renewal program is put on a much more grandiose scale, demolitions will continue to be a drop in the bucket. Postwar slum clearing and urban renewal razed only 115,000 substandard units—a number normally replaced by one month's building. Even if losses from fire, windstorm and other causes are included, less than one year's new construction is needed to replace this entire decade's loss from the housing inventory." Surprising figure: only 800,000 total demolitions from 1950 to 1956. At this rate, the nation will tear down less than 1% of its pre-1919 housing during the 1950-60 decade.

It is not true that most substandard units are in central cities.

Some 70% of 1956's 13 million substandard units lay outside standard metropolitan areas—areas which have 60% of the US housing stock. And more housing outside SMAs is lapsing into blight then inside.

Says Wolff: "A popular view seems to have associated poor housing with slums, and slums with our large older cities. . . . Even if this once may have been partly true, it is not accurate today . . . The fact is that met areas have improved their housing at a much faster clip than non-met areas."

Slums may even now be greatly a farm housing problem. Farms accounted for 30% of the deficient housing in 1950. The 1956 inventory did not compare farm and nonfarm substandard units. But the met area figures imply, says Wolff, that "a major portion of the task ahead lies in improving our stock of rural housing."

It is not true that the bulk of substandard housing is minority housing.

Census figures for 1950 show only 15% of substandard units were occupied by non-whites, Wolff notes. "On this basis, we cannot assign a role of major responsibility for deficient housing to the Negro, even though his share is staggeringly out of proportion to his small share of the total housing stock. Minority housing is unquestionably a major social problem which needs public attention, but it is not the root of the problem."

Where vacancies really lie

Two other surprises emerge from Wolff's analysis of the new Census figures:

1. Nearly half the nation's vacant housing units in 1956 were substandard (vs about 20% for occupied units). To state it another way, while vacant inventory accounted for only about 10% of the nation's housing, it contained 20% of the substandard units. And Dr Wolff forecasts: "It appears probable we will continue to shift more and more substandard units into vacancy."

2. Nearly 10% of new construction is substandard. Of the 10.9 million new units built between 1950 and 1956, more than 1 million were rated deficient. "The problem," Wolff adds, "lies mainly with rural areas and smaller towns and cities."

As Dr Wolff sees it, the 1956 NHI figures not only disclose for the first time the tremendous impact of rehabilitation on creating better living standards for the nation. They also suggest that the real problem is not the substandard home, but the substandard neighborhood. (This idea is coming in for more and more attention from Administration officials—see p 52.) "The gains we have made have been toward solving the housing problem of the 1930s and 1940s—essentially the removal of the substandard house," says Wolff. "Completing this task is now manageable. The 1950s and 1960s face us with new and different problems: deficient neighborhoods. . . . It is the problem generated by the expanding city in sections where planning was inadequate, enforcement lax. Neighborhoods, with poor housing interspersed, developed before controls were imposed. Now, good houses stand beside bad with the latter breeding the intrusion of lower economic levels throughout . . . Central city areas, handicapped by lack of space, air and traffic glut, are urgently motivated to renewal or prevention. But this force tends to diminish [with] distance from the center. So the fate of the fringe area and suburbs lies in early arrest of blight. Control of land uses, street widening, improvement of sewers and other utilities, better recreational facilities and schools all become part of the problem of housing. In the decade ahead, we may solve our present problem—the substandard house -but the decline of the outlying neighborhood continues unnoticed."

FHAide says old dogs stalling UR in field

For years, sponsors of Title I Redevelopment projects have cited the mossback policies of FHA's local insuring offices as a major drag on residential rebuilding. And for years, agency officials have sloughed off the blame.

Now, a top FHA aide, C. Franklin Daniels, special assistant for urban renewal to Commissioner Norman P. Mason, has publicly admitted, that the finger may well be pointing in the right direction.

Addressing a conference on land disposition held in late November in New York City by HHFA Region I (New York-New England), Daniels told 400 investors, realtors, bankers and local officials that for years the phrase "economic soundness" has acted as "a retreat behind which our local insuring offices could hide" when they didn't wish to insure a project.

In 1944, when it created Secs 220 and 221 for urban renewal, Congress eliminated the criteria of "economic soundness." FHA insuring officers are supposed to "resolve any reasonable doubts in favor of going ahead," said Daniels.

But Daniels, who said his job is to visit local appraisers and "instill in them this concept behind the urban renewal program," admitted that it's not easy to teach old dogs new tricks.

Blurted Daniels: "I must say that I find that by and large it is very difficult to persuade the directors of this new approach. It is somewhat..." He paused, then amended: "It is not very difficult to persuade the directors. It is sometimes a little bit more difficult to persuade some underwriting personnel [who for years] have been imbued with the idea that FHA is a conservative insuring company."

One possible cure now being explored by FHA, said Daniels, is to hire a special staff for urban renewal in local insuring offices.

Pittsburgh ordinance bars race bias in private housing, aims at realtors

Pittsburgh has become the second US city to adopt an ordinance making racial discrimination in private housing illegal.

The law is modeled after the first one, New York City's (Jan '58 News). But Pittsburgh's is tougher in two ways: 1) it applies to all groups of five-or-more units under one ownership (compared to ten continguous units in New York) and 2) it goes out of its way to prohibit discrimination because of "race, color, religion, ancestry or national origin" by real estate brokers, salesmen, agents and lenders, as

The law is the kind of legislation that Mayor Richardson Dilworth has been urging Philadelphia to shun—not because he favors segregation but because he fears its effect would be to increase the concentration of Negro families in the center of the city as long as the surrounding suburbs lack a similar ordinance.

The Pittsburgh law passed the city council Dec 8 without debate or comment. It is effective June 1. This is to give the city's Commission on Human Relations, which must enforce it, time for an educational campaign. suasion"—discussion and conciliation.* conciliation fails, the commission will hold private hearings followed, if necessary, by public hearings. If it finds a violation exists, it will then refer the case to the city law department for court prosecution. Maximum penalty: \$100 fine and costs, or 30 days in

As in New York, the enforcing commission will have power to investigate complaints of racial bias from victims, from organizations like NAACP, or on its own motion. But, Executive Director George Culberson says the approach will be chiefly via "friendly per-

Under the stiff terms of the ordinance it-

*Such procedure has resolved 400 complaints under Pittsburgh's six-year-old fair employment practices law, without any court action.

self, it will become "unlawful housing practice" in Pittsburgh, if racial discrimination is the reason:

- For realty brokers to "represent that a housing unit is not available for inspection, sale.... or rental when in fact it is available."
- For any realty broker or owner to "discriminate in the furnishing of any facilities or
- For "any lending institution to discriminate in lending money.'
- For realty men, owners or lenders "to publish or circulate . . . any notice, statement or advertisement, or to announce a policy, or to use any form of application. . . . or to make any record or inquiry in connection with the prospective purchase, rental or lease of housing, which expressed directly or indirectly any limitation, specification or discrimination . . ."

Even the public hearing which preceded the ordinance's passage produced only a little opposition—all from realtors. Said past President Craig H. Grugan of the Pittsburgh

Realtors: "The question that has to be faced by the builder and the mortgage company is whether . . . [proposed apartment houses] will be highly occupied with enforced integration of colored and white, or whether the white will move, creating vacancies or creating mixed occupancy at a lower scale of rents. Without the assurance of high occupancy, there cannot be adequate mortgaging. Without adequate mortgaging there can be no building. This legislation can dry up construction because lending for integrated housing would be a hazardous adventure by conventional mortgage standards and from an assured profit angle.'

John B. Nickles Jr, chief counsel for the realtors, contended the law itself was discriminatory for limiting its application only to those owners with five or more units of housing for rent or sale.

In rebuttal, Culberson of the Human Relations Commission said that owners' fears of losing property rights and of declining values', have been fostered by real estate operators. He said the realty board "has consistently overemphasized the compulsory aspect [of the law] when it has shown no interest in doing anything on a voluntary basis."

Indications are that state legislation now pending on the same subject will not have as easy a time of it. Roland S. Catarinella, first vice president of the Pittsburgh home builders (who were officially silent on the city law) indicated his organization would fight the proposed state law. "I never have nor would I now sell one of my properties to a Negro in a white district because I would not like to jeopardize my investment," he said at a public hearing Dec 2. He added: "The Negro should have a program of education, too. They have to pick themselves up by their bootstraps and make the whites want to live with them." Most HBA members operate in the 128 communities outside the city limits, are unaffected by the city law but would be affected by a state law.

CODES:

Top Iowa court voids law barring builder from wiring

Iowa's Supreme Court has slapped down a local ordinance handing licensed electricians a monopoly of all wiring. It unanimously upheld Builder Ernie Zerble's right to wire the homes he builds himself.

For over 25 years, Mason City (pop. 27,960)

has had an ordinance barring residential wiring except by locally licensed electricians. Zerble, chairman of NAHB's code committee, asked the city for a permit to do his own wiring on a house he was building for sale. When city officials refused, he did the wiring himself—personally—to save costs. The mu-nicipal court in Mason

Walter Daran

City convicted him of violating the ordinance, fined him \$150.

Zerble, who builds from 6 to 15 homes a year, appealed. A district court reversed the conviction (June, News). It held, as did the Supreme Court, that the town has the right to regulate and inspect electrical installations but not the right to limit who can do the work. The city never claimed Zerble's wiring did not meet code requirements. It simply argued that he was not licensed.

Ruled the Supreme Court: "The general rule seems to be . . . that the power of the municipalities to regulate does not include the power to license unless specifically cited. The Iowa legislature has drawn a distinction between regulate and license. It did not consider that by giving the municipality the power to regulate it intended that the power to license would be considered as either implied in, or incident to, or indispensable . . .'

Mason City electrical contractors financed the city's high court appeal. The court ordered the city-and thus apparently the electrical contractors—to pay Zerble's costs as well. The tab will run about \$1,500.

ASA decides against uniform code project

As expected, American Standards Assn has turned down proposals to develop a single national building code for one- and twofamily houses,

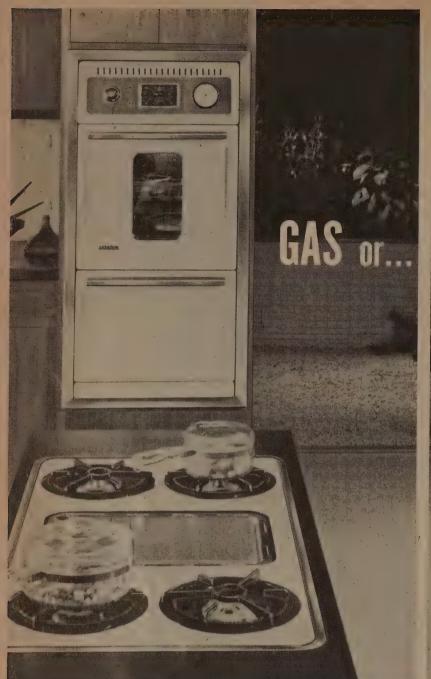
At the same time, ASA urged regional code organizations (whose solid opposition helped defeat the project) to 1) make "further effort at code unification" and 2) extract from their comprehensive building codes provisions applying to one- and two-family units to make it easier for cities to adopt them.

The standardization plan was submitted to ASA last June by Henry R. Luce, editor-inchief of House & Home and other Time Inc publications, on behalf of 14 housing industry trade groups. ASA convened a conference Sept 9 in New York City to see if a consensus of affected interests favored the idea. The final vote by 84 groups: yes 29, no 24, not voting 21, no votes received 10. This, ruled ASA, was no consensus—even after allowing for the relative weight of proponents and opponents.

Another model code

Another building officials' group has just published its own model code. This one is the work of the Midwest Conference of Building Officials. It was adopted last year. It will be supplemented annually with a re-issue planned every three years. Copies are for sale (for \$6) at 205 W. Wacker Drive, Chicago 6.

NEWS continued on p 78





NOW! you can offer either

at no extra cabinet cost!

Whether the prospect wants gas or electric, you can now give him whichever it takes to sell the house, with no change of cabinets. Same size opening is used for ovens and cook tops in either gas or electric of corresponding models. And, when you offer prospects the new Suburban, you're offering the built-in range with all the features most women want:.. all the features Home Economists all over the country have said women want! Your prospects will see and want these features in the Suburban unit you put in your kitchens... just as they see them pictured in black and white and in full color ads in leading home magazines.

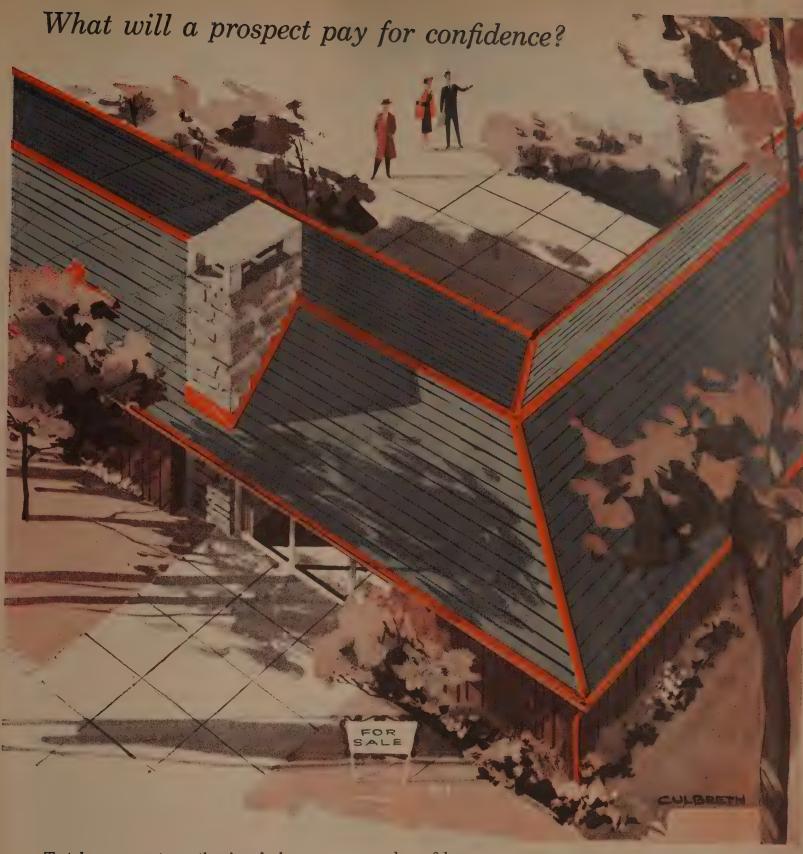
NEW SUBURBANETTE!

Be sure to see the new Suburbanette ovens designed and built especially for builders. Space 763 and 764 in the Coliseum, or write for complete details.

suburban

America's Finest Built-in Range

Samuel Sta	mping & Enameling Co., Dept. HH-19, Chattanooga, Tenn.
I'd like to	have the facts about Suburban.
☐ Gas	☐ Electric
Name	
Address	
City	State



To take on a mortgage the size of a house, a man needs confidence. Conspicuous use of copper can help you give him that confidence.

Thirty years ago a builder knew most of his customers personally. But today he sells more houses to more people — many of them new to the community. Therefore, the houses themselves must do more of the selling job. But how can a prospect judge a house? Often he just doesn't understand subtle construction differences, and a lot of them he can't see anyway.

There's one thing, though, that he can see and does trust — copper. He remembers how his Dad proudly insisted on copper flashing, gutters and downspouts; and he's probably learned from his own painful experience about

rustable plumbing. When he sees copper water lines, drainage systems, heating lines, flashing, gutters and downspouts *built into* a house, he feels pretty safe in assuming that the unseen construction is of similar quality. This kind of confidence is valuable to him and he will pay for it.

Fortunately, he needn't pay much. Copper flashing, gutters and downspouts cost a little more, to be sure, but they're some of the cheapest salesmen a builder can hire. And many builders report that copper plumbing actually costs *less*, installed, than rustable materials.

Copper lasts. Builder call-back records show it. Prospects know it. So do their bankers — and yours — who, too, are interested in demonstrated quality. If you'd like further information on the use of the copper metals in residential construction, write the Copper & Brass Research Association, 420 Lexington Avenue, New York 17, New York.



Group mortgage buying by New England banks gets a new aide, Bernard Dill

Massachusetts' FHA Purchasing Group, which buys out-of-state FHA and VA mortgages for 60 New England savings banks, has hired its first fulltime officer.

He is **Bernard V. Dill**, for 24 years an examiner for the Massachusetts bank commissioner. His last post was director of savings bank examination.

Hiring of a staff employee marks the 10-year-old group's first effort to spread out its mortgage buying by making more allocations to correspondents, rather than buying mostly for immediate delivery. Dill will direct rela-

James F. Coyne



MASSACHUSETTS' MORGAN & DILL More mortgages on quotas

tions with participating banks. But buying mortgages and relations with servicers will remain the responsibility of Robert M. Morgan, vice president of the Boston Five Cents Savings Bank,

Morgan is one of the founders of the purchasing group. As its secretary, he has handled all of its business from his office since the group started with eight members. Since its founding, the group has bought more than \$300 million in FHAs and VAs—all from seven southern and southwestern states.

"We have made some allocations in the past," Morgan comments. "But now we expect to get into it much more heavily—probably doing 50% of our buying that way."

Massachusetts-born Dill, father of four, lives in nearby Quincy, is also a director of the Boston University Alumni Assn. Morgan, graduate of Dartmouth and the Harvard Business School, was a member of the President's advisory committee on housing policy in 1953. He is generally regarded as one of the most astute mortgage men in the business. Hiking and climbing are his chief recreation.

OFFICIALS: FHA has created a new operating division for cooperative housing and named Harry E. Johnson, director. Johnson has been a specialist in co-op matters for FHA's legal division since 1951. He became chief counsel of division's co-op section in 1956. Dwight D. Townsend, special assistant to the commissioner, remains in overall charge of FHA's co-op program. John A.

Grubbs, North Florida director for FHA since last February, is new Miami director, replacing Charles B. Spofford Jr, who retired after 41 years' government service. Lilburn Homan, New Mexico FHA director since March 1955, resigned to manage New Mexico operations of Hughes Investment Corp, Texas firm headed by past NAHB President Dick Hughes.

Loebbecke bests Breliant in LA merger competition

William Breliant, brash young (36) president of Los Angeles' Security Title Insurance Co, seldom loses a fight—but he just lost one of his biggest.

He lost to his arch adversary, Title Titan Ernest Loebbecke, president of Title Insurance & Trust Co of Los Angeles, the nation's biggest title company.

Two years ago Breliant, whose ambition has been to make Security bigger than TI, failed in an effort to merge with California Pacific Title Co of San Francisco. Reported reason: inability to agree on management of Calpac after merger.

Last year, Loebbecke's Title Insurance made an offer to Calpac. The deal called for exchange of 1.85 shares of TI common stock for each 3.1 shares of Calpac common with a one for one deal on preferred. Chief advantage over a cash deal (which TI offered as an alternative): Calpac stockholders would not have to pay income tax until they sold the stock.

Breliant, who gained control of Security Title in a proxy fight (Dec '56, News), promptly made another offer which he insisted was better than TI's. Security would purchase each share of Calpac for one share of Security plus \$50. Preferred stock would

H&H staff



LOEBBECKE



Bill Farly

BRELIANT

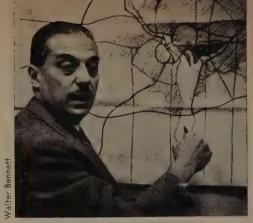
be exchanged one for one plus \$5.

From a cash standpoint, Security's offer sounded better. But it would put a big tax bite on Calpac stockholders because of the cash factor.

Calpac's board mulled both offers for a week, then announced in mid-December that it was going ahead with the Title Insurance merger, subject to approval of shareholders of both companies.

Breliant has the consolation that even if he had won, a combined Security-Calpac would still have been much smaller than Title Insurance. The figures (in millions):

	Assets	'57 Gros
Title Insurance		\$33.9
Security Title	 11	7.1
California Pacific	 9	1.3



PLANNER DOXIADIS & PLANS
Instead of rings, a north-south axis

Greek planner tells Washington its renewal plans may fail

The last time Washington did any all-out city planning it called in a Frenchman named Pierre Charles L'Enfant. A temperamental genius, he wrangled with Congress, was late getting his pay and barely made Arlington cemetery when he died.

Now, the city fathers preparing to mop up slums and untangle downtown traffic have again asked for foreign advice. And Constantine A. Doxiadis, former Greek minister of reconstruction who is now planning consultant to Iraq, Syria, Pakistan, the UN and World Bank, says they are going at it all wrong.

"American suburbs," says Doxiadis, "are nomadic settlements . . . just flung on the earth . . . and not related to anything, only ruining nerves and creating frustrations." The center of US cities "turns into an uncontrolled jungle where the citizen has been driven out by the car. Washington suffers from all these problems, but in addition it is not even a complete city. Big parts of it stay overnight with the neighbors. It's imperative for a crusade to save the American citizen from colossal burdens on his finances, time, physical and nervous strength by reforming the city. Washington can become the pilot project."

How? This is his recipe:

- Forget current notions of the city block and institute "sectors"—mile square enclosures with auto freeways and parking space on the perimeter, dead-end streets thrusting toward the center and a "completely human" space in the middle for shops, playgrounds and markets—with no autos.
- Abandon the trend to expand Washington in concentric circles, which have tangled thousands of commuters in hopeless traffic snarls coming to and from work in Maryland and Virginia.
- Reshape the city's growth along north-south freeways paralleling the Potomac, and let the river itself become the biggest freeway of of all, carrying commuters by boat.
- Put a strong central body in charge of urban renewal and planning because too many cooks are spoiling southwest Washington redevelopment. A good planning proposal, like carless dead-end streets, gets bogged down when the fire department claims they're a fire hazard. "They closed off some streets in Baltimore," mused Doxiadis, "and people were very happy. I asked them."

Developers Desser, Garfield take over Lefcourt Realty

Big developers are rapidly tying up huge hunks of Florida land—a fact which continues to produce some king-sized real estate deals.

In the latest, Developers Arthur Desser and his partner, Harold B. Garfield have turned over all their holdings to the Lefcourt

LABOR:

Realty Corp, receiving in return 2,622,000 shares in the firm—giving them control.

As part of the same deal Lefcourt agreed to exchange stock for a 56,000-acre tranch in Palm Beach county, owned by Samuel Friedland, chairman of the board of Food Fair Stores.

Lefcourt is a New York realty investment firm which has built and operated commercial properties in scattered cities. It is listed on the American Stock Exchange. Friedland has been nominated as new chairman of the firm; Desser as president.

Desser and Garfield's land holdings included 16,000 acres in two locations in Florida, one in California and one in Maryland (Aug '58 News).

William H. Slemp Jr, 39, who in November was named director of marketing services and sales for NAHB (and its convention and *Journal*) and the Natl Housing Center, has resigned to take a new job with Kaiser Aluminum.

Kaiser has put Slemp in charge of its new residential sales division. Before joining the Housing Center he was building industry sales manager for Frigidaire.

Architect (and ex-soap executive) Chuck Luckman is carrying on alone after the withdrawal of his partner Architect (and exmovie maker) William Pereira, from their eight-year association in the Los Angeles firm of Pereira & Luckman. Pereira's reported reason: skyrocketing success of the firm (it has planned more than \$1 billion worth of construction now in place) left him too little time for creative work and personal attention to projects he undertook. Luckman's firm is now Charles Luckman Associates. Pereira's is William I. Pereira and Associates.

DIED: Robert Lockwood Sweet, 52, president of the R. L. Sweet Lumber Co (Kansas City, Mo.) and its prefab industry, Standard Homes, of a brain tumor, Nov 21, in St

Lukes Hospital there.



SWEET

Sweet, a veteran of 23 years in the lumber business, was a leader in adopting new methods. His firm was the first in the Midwest to make roof trusses, wall sections and platforms. He was a director of the Lumber Dealers' Research Council and a member of National Retail Lumber Dealers Assn, the Home Manu-

facturers Institute, the Kansas City Home Builders Assn and Real Estate Board.

OTHER DEATHS: Westchester Builder Louis Schiff, 46, Nov 7, in his Forest Hills, N. Y. home; George H. Gray, 65, president of the Pyle-Gray Real Estate Co, Brooklyn, and a governor of the American Institute of Real Estate Appraisers, Nov 9, of a heart condition in his Freeport, N. Y. home; Evan A. Mattison, 54, former Bank of America vice president (1945-52) and credit expert instrumental in working out VA home loan system, Dec 3, at VA Hospital, West Los Angeles, after a long illness; Builder-Realtor Myers Y. Cooper, 85, former (1929-31) governor (R) of Ohio, Dec 6, in Cincinnati.

Same workers but a different union bring productivity boost in Fresno

Homebuilders say they ask only a good day's work for a day's pay from union tradesmen.

They seldom get it in most cities. But they do in Fresno, Calif. where builders have just signed a new three-year contract with John L. Lewis' United Construction Workers. Builders report happily that productivity is up and labor relations are fine.

The Homebuilders Assn of the San Joaquian Valley signed its first contract with the UCW a year ago, thus finessing and outmaneuvering a six-month strike by AFL-CIO carpenters. UCW is an offshoot of the United Mine Workers catch-all District 50, which has organized heavy building trades in eastern mining areas—but few in homebuilding anywhere.

In the past year, say Fresno builders, they have experienced no slowdowns, no unauthorized or authorized walkouts, no jurisdictional squabbles to hold up work. And featherbedding is down to almost zero.

More pay for more work

Now getting what they believe is more for their labor dollar than ever before, builders gladly pay a wage scale which is currently higher, trade for trade, than that paid AFL-CIO tradesmen in the same area by general contractors. Says Builder Don Mathews, who has doubled as the HBA's executive vice president for the past year: "They treat us like kings. It's wonderful.

"With the AFL-CIO building trades, if our men didn't like conditions or work assignments they would do what *they* wanted, not what *we* wanted. The UCW is different. Now the men do what *we* want.

"The union demands a day's work for the men. They aren't as prissy when it comes to working conditions."

Actually most of the tradesmen are the same men who worked on the builders' jobs as members of the AFL-CIO. Most have quit the AFL-CIO now, though a few have dual membership and work also on heavy construction jobs. (AGC still has a contract with the AFL-CIO.)

They simply do more work for builders now. The UCW is lenient about power tools, will let almost anything be used on a job—including paint sprayers and rollers.

UCW maintains no hiring hall, lets the builder decide whom he will hire. Says UCW Organizer Andrew Denko: "If a contractor calls our office and says he wants three carpenters, we call all the carpenters we have looking for work and tell them to go on out—and may the best man win. The contractor does his own hiring and he hires the best men."

More work for crews

Homebuilders have willingly made life for their workmen more pleasant. Many now make an effort to spread out work to keep the same crew working regularly.

In the first months after the UGW contract was signed, this was especially welcome to union men. AFL-CIO officials at first lifted the cards of men who joined UCW, making it impossible for them to work on AGC jobs. This policy has since been abandoned.

The new contract not only gives a 20¢ hourly wage boost, it ties the rate to the cost of living index. Thus for each 0.5 of a

point the cost of living index goes above the 123.7 floor (where it was when the contract was signed), hourly wages will be boosted 1¢ an hour. Adjustments will be made twice a year. If the index falls wages will be cutbut not below the starting point.

How UCW basic hourly wages compare with those of AFL-CIO tradesmen doing the same work:

TRADE	OLD UCW	New UCW	AFL-CIO	
Carpenter	\$3.25	\$3.45	\$3.371/2	
Laborer	2.50	2.70	2.681/2	
Plasterer	3.35	3.55	3.50	
Bricklayer	3.70	3.90	3.75	
Painter	3.15	3.35	3.23	

The contract includes a ban against picketing. UCW agrees not to recognize other union picket lines.

This overcomes what was one of the biggest problems with the AFL-CIO—a total shutdown of a job when any disgruntled trade threw up a picket line.

More UCW organizing

UCW is making more gains in the Fresno area, organizing those plumbing and electrical subcontractors who do most of their work on homebuilding.

Its chances of organizing the AFL-CIO trades working for general contractors seem remote. AGC is in the middle of a five-year contract. But generals have agreed to take bids from subs who have signed with UCW.

The AFL-CIO has shelved threats of retaliation (eg picketing) against UCW. It now lets AFL-CIO subcontracting trades work on homebuilding, lets UCW subcontracting tradesmen work on general contracting. It would allow neither as recently as last summer.

These conciliatory actions are more defensive than fraternal. The AFL-CIO trades have already lost 550 men to the UCW. Efforts to woo the UCW men back with promises to waive heavy (and unpaid) fines levied for jumping to UCW have been unsuccessful.

Yet Loyd Myers, executive secretary of the AFL-CIO Building Trades Council in Fresno, insists his union has nothing to worry about, while UCW is doomed. "We have seen this thing happen before in other parts of the country and it won't last. We're just not getting very excited about it," he says.

Since UCW's success in Fresno, it has moved strongly into San Bernardino. Now it is starting to organize in booming San Jose.

Union approves any devices which will speed bricklaying

The bricklayers union has decided to accept any devices which will help its members lay bricks faster on new home construction.

Approval, voted at the union's annual convention, opens the way for use of the corner pole. This slotted pole, used with guide lines, lets the bricklayers lay brick all along a wall instead of waiting for the corners to be built up first.

Structural Clay Products Institute which developed the corner pole, calls the union action "progressive and praiseworthy."



J. R. V. M. "Jake" Lefferts, C. T. "Buster" Kilcomins and R. S. "Bob" Eisner, who build and sell all-Gas homes in Oak Hill, New Jersey report: "Only Gas, and modern gas appliances, can give home buyers all the conveniences they want-with the economy they demand!"

Leading New Jersey

"For Builder and Buyer



NEW GOLD STAR STANDARDS! AUTOMATIC . . . ALL THE WAY!



Now you can show your customers they're getting the latest in range design! This Gold Star seal guarantees at least 28 cooking conveniences! You can offer such sell-on-sight features as an auto-

matic rotisserie, griddle, meat-thermometer, Burnerwith-a-Brain*—everything designed to make Gas cooking even faster, cooler and cleaner than ever. Choice of 14 makes—the finest Gas ranges made.

ICE CUBES-AUTOMATICALLY!

No more trays to fill or empty. An RCA Whirlpool Gas Refrigerator delivers non-stick ice cubes ready to use, makes more as fast as they're needed. Even the water is supplied automatically. Roomy freezer locker. Automatic defrost. Constant balanced cold—never any "on-off" fluctuation. Comes in beautiful pastels as well as white. 10 year warranty.

FASTEST LAUNDRY EVER!

Today's Gas Washer-Dryer Combinations (or separate matching units) are completely automatic. And so fast! No warm-up wait, so the total wash-rinse-dry cycle is shorter. Gas is more economical to use, too. And safer for clothes. Gentle Gas heat fluffdries naturally from start to finish-can't stiffen even the most delicate fabrics.

You save on installation ... they save on the monthly bills— ONLY GAS

© Am. Gas Assoc., Inc. *A.G.A. Mark



the Best Bet is A GAS!"





with a modern Gas Water Heater. The moment you turn on the hot water faucet, he Gas under the tank comes on full force, heating more. It shuts off automatically, oo. Easy to install. Extra economical—because Gas ecovers so fast, a family loesn't need as big a tank as t would with any other fuel.

ALL IN ONE!

Now one compact unit heats the whole house in winter, cools it in summer. What a money-saver for both builder and buyer! A single unit takes less space, requires the installation of only one set of ducts and, a single thermostat. And, efficient Gas costs less to use. Available in a choice of models to fit any size house.

INCINERATOR

Exciting new convenience that insures a more sanitary community, reduces insect pests. Homéowners will welcome it. So easy to operate -just drop in trash and garbage. The Gas flame does the rest-immediately. No smoke, no odor, for a Gas flame consumes these, too.

PICTURESQUE-**BUT PRACTICAL!**

Newest idea in outdoor lighting, Gas lights add graciousness to steps, doorways, patios, porches. Adaptable to post, pipe or bracket mountings, they provide soft, non-glare illumination - at lowest possible cost.

AMERICAN GAS ASSOCIATION



does so much more...for so much less!



"Andersen Windows install easily, help sell, eliminate maintenance"

... says John Weber, North Canton, Ohio, builder of quality homes

"I'm constructing around 70 homes in the \$23,000 to \$30,000 range in my East Maple Heights development," continues Mr. Weber. "I'm using Andersen Windows, double glazings and screens in every one,

"I like their low initial cost, easy installation. And maintenance cost is nil. The public is very familiar with them, too. They prefer wood windows. This helps greatly in selling my homes.

"Another thing. Andersen Windows are easy to clean

and operate from *inside*. And they close weathertight. I've checked them during cold weather and found no infiltration of air at any point."

Andersen Windows are helping to deliver extra sales and savings to builders everywhere. They can do the same for you. Their handsome wood sash and frames add character, natural warmth and beauty to your homes no other window material can match. Their precision manufacture assures trouble-free operation



Extra sales appeal, extra savings! Handsome wood sash and frames of Andersen Beauty-Line* and Flexivent® Windows above add unmatched natural warmth and beauty to Weber homes. And buyers not only know Andersen Windows, they prefer them 9 to 1 over any other brand according to a recent national survey. Precision design and construction of Andersen Windows practically eliminates callbacks. As Mr. Weber, above left, says, "Maintenance is nil!" For all their advantages, Andersen Beauty-Line Windows have a lower total installed cost than many inferior windows—including many cheap double-hungs.

*Patent pending

for the life of your homes; practically eliminates window callbacks that can eat into your profits on a home. And, prospects know Andersen Windows are highest quality. This helps create greater confidence in your homes. Makes people more willing to buy.

For complete facts, see your lumber or millwork dealer, Sweet's File, or write Andersen Corporation, Bayport, Minnesota. Andersen Windows are sold only through dealers throughout the U.S. and Canada.

Andersen Windowalls TRADEMARK OF ANDERSEN ORPORATION

ANDERSEN CORPORATION, BAYPORT, MINNESOTA



TESTED AND SELECTED FOR USE IN NATIONAL





Above: National Homes "Williamsburg" mode

The "OVERHEAD DOOR"... featured by National Homes ... installed by factory distributors

Important to National Homes and to all manufacturers and builders of homes is The "OVERHEAD DOOR" Distributor Installation Plan. The builder of a manufactured home gets The "OVERHEAD DOOR" as part of the home package. But the garage door comes to him direct from The "OVERHEAD DOOR" distributor in his vicinity. And this distributor's service experts can install the door in less time than the builder's crew would require. The manufacturer carries no garage door inventory. The builder gets a top-quality door . . . fast, professional, guaranteed installation . . . and freedom from maintenance. Look for "OVERHEAD DOOR" in the WHITE PAGES, or mail the coupon . . . today!

VISIT BOOTHS 92 AND 93 AT NAHB SHOW, CONRAD HILTON HOTEL



FOR 37 YEARS more people have bought The "OVERHEAD DOOR" than any other brand.

MADE ONLY BY Overhead Door Corporation, originator and perfecter of the upward-acting sectional door.

SOLD ONLY BY the Overhead Door Company of your city.

Overhead Door Corporation Dept. HH-1 Hartford City, Indiana

Please send more information about The "OVERHEAD DOOR" and installation economies by Overhead Door distributors. Also send ideas for building extra living space into our homes.

101	Dananig	CAULA	11 4 111E	space	111100	Out	nomes.
Na	me						
Co	mpany_						
	dress						

Zone___State

THE HOUSE THAT SAYS GOODBYE TO PAINTING CARES AND COSTLY REPAIRS!



The "Chateau," 1700 square feet of exciting California Contemporary design. Charm-filled interiors complemented by practical, maintenance-free aluminum exteriors.

National Homes new "Viking" models feature weather-tight, maintenance-free "ALODIZED" aluminum sheath over entire house!

bout! Virtually every inch of every "Viking" home exterior is overed with a permanent, corrosion-proof skin of aluminum, ne wonder metal, and treated with ALODINE, a development of Amchem Products, Inc.

LODINE reacts chemically with aluminum to form a coating nat combines with the aluminum and greatly increases the

natural corrosion resistance of this strong, light metal. In addition, the

A

Cutaway view at left shows aluminum siding (A). The Alodine process chemically reacts to form a coating (B) that seals the aluminum surface and provides a mechanical and chemical bond for the paint (C).

ALODINE coating forms a durable anchor for paint, preventing chipping and peeling of finishes,

In dollars and cents, National Homes estimates ALODIZED aluminum exteriors will mean a saving to the home owner of more than \$4,000 during the first 20 years—enough to furnish the home in lavish style!

Here is truly the house of the year. Many style-wise decorator designs to choose from. Gay, spacious interiors with room to grow in. Lavishly endowed with convenience features. The "Viking" Line is National Homes realistic answer to modern living at the same prices as conventional model homes!

The "Viking" Line is on its way to a preview at your city soon—watch for the announcement. You owe it to yourself to see the house of the year that's sure to become the home of your dreams!

TESTED AND SELECTED FOR USE IN NATIONAL



VIKIN



LINE

Alodine is a registered trademark of Amchem Products, Inc.



AMCHEM PRODUCTS, INC.

Ambler, Pa.

Formerly AMERICAN CHEMICAL PAINT COMPANY
Detroit, Mich. • St. Joseph, Mo. • Niles, Calif. • Windsor, Ont.
Chemicals for Industry and Agriculture





Space-saving GM Delco heating and central air-conditioning unit ... in popular closet installation

NATIONAL HOMES

that can help sell your new homes

The year 'round living comfort assured by this world-famous quality brand is a big factor in selling new homes. That's why you see so many successful builders installing GM Delco heating and air-conditioning.

Quiet...dependable...economical...GM Delco systems, developed and backed by General Motors, have strong consumer acceptance. Today's home buyer is looking for quality brands—Delco in your homes helps their sale.

Take advantage of national brand product acceptance. Eliminate any uncertainty about comfort in your homes in any climate by using General Motors Delco Heating and Air Conditioning. Write, wire or phone for more details.

DELCO APPLIANCE DIVISION

ROCHESTER 1, NEW YORK
GENERAL MOTORS CORPORATION

86



Among the most exciting features of this new National Home are two entirely new designs in rolling glass doors by Capitol. Opening an entire wall to the out-of-doors, they are the

key to modern indoor-outdoor living.

In the Roll-Fixed-Swing, one panel slides, one is fixed, and one is a hinged glass door. The Roll-Fixed-Roll has one fixed and two moving glass panels. Both designs are exclusive with Capitol.

These units and the revolutionary new sliding windows with integral outside trim bring the National homeowner new dimensions in livability-spaciousness, beauty, and yearround comfort.

Add to this the ease of operation and freedom from maintenance characteristic of all aluminum building products by Capitol!

More and more successful builders are turning to Capitol for their door and window needs.

CAPITOL PRODUCTS CORPORATION

Mechanicsburg, Pennsylvania

Manufacturing facilities: Mechanicsburg, York, Philadelphia, Penbrook, Hazleton, Pa. Chicago • St. Louis • Sherman, Texas • Anaheim, California



TESTED AND SELECTED FOR USE IN NATIONAL HOMES



ROLL-SWING DOORS BY CAPITOL-In warm weather, living space is expanded at the touch of a finger. In winter, the view can be enjoyed from the weatherized comfort of the living room. Ask about the all-new rolling doors by Capitol.

See our Exhibit at the NAHB Show, Chicago . Jan. 18-22 Booths 306-7-8 • Hilton Hotel









QUALITY INSULATIONS

Their many advantages are now available to you within 24 hours regardless of your plant's location:

The CHATEAU model in the new Viking Line being offered by National Homes Corporation, Lafayette, Indiana

NATIONWIDE SHIPPING FACILITIES

From **7** Strategically Located Plants

• With 21 years experience in furnishing the insulation requirements of home manufacturers, American Rock Wool Corp. has worked with the industry since its inception.

Now, with mineral wool plants located from coast to coast, THERMAFIBER insulation products are available on an overnight shipping basis anywhere in the country.

Top quality, continuous research on improving insulation products and better service are why you should specify THERMAFIBER in your homes!

Thermafiber Insulation Products Include:

- Plain Felts (no paper)
- Open Face Batts (vapor barrier paper only)
- Enclosed Batts (vapor barrier and breather papers)
- Single Foil (vapor barrier foil only)
- Double Foil (vapor barrier and breather foil)
- Reverse Flange Batt (for factory sidewall application from exterior side of panel)

All of these products are available in standard sizes and also special dimensions. In addition, THERMAFIBER felt and granulated and loose fill insulations are offered for special applications,



PLANTS *

EXECUTIVE OFFICES ©





There's a

free-as-a-bird feeling that women like in the '59 Viking!

■ No feeling of confinement here. National Homes' new VIKING Line adds zest to living through "open planning". With space dividers instead of eye barriers. And wonderful sliding glass doors that are "light as a feather" to open or close.

In these doors, National Homes offers genuine $L \cdot O \cdot F$ Thermopane® insulating glass . . . the insulating glass they've used exclusively for eight years . . . to make homeowners more comfortable all year 'round.

Be sure to see the 1959 VIKING on display this month during the N.A.H.B. Convention. It may well be just the line you're looking for. And be sure to use L·O·F *Thermopane* as a house-selling feature. It's a quality product people know and want.



LIBBEY. OWENS. FORD

a Great Name in Glass
TOLEDO 3, OHIO

FRUITWOOD

is just one of the exciting

NEW YOUNGSTOWN KITCHENS

You will see at the Builder Show.

CONRAD HILTON HOTEL

BOOTHS 118-122

NEW
"SNAP-ON" FRONTS
A GREAT NEW
INNOVATION...
DESIGNED FOR BUILDER NEEDS!

Now builders can offer any buyer a complete choice of kitchen styles.



Letters

24 Quality Houses

I am very disappointed in the 24 Quality Houses for 1959 (H&H, Nov '58). They may be all right for Hollywood, Palm Springs, or Miami Beach, but for the average worker, it is only a pipe dream that can't come true. The local contractors that I showed them to just laughed and said try to sell one of those. Why don't you come down to earth and quit dreaming?

KELM'S LUMBER YARD Rosamond, Calif.

I found in your current [Nov] issue more truly brilliant floor plans and authentically advanced-design homes than have ever before appeared between the covers of one housing publication.

JOSEPH F. POLEK Philadelphia.

Manufactured homes

The December issue of House & Home arrived today with your outstanding review of this year's progress in prefabrication. We feel that your presentation was factual and to the point.

EUGENE E. KURTZ, president Inland Homes Piqua, Ohio

Your December issue devoted to the manufactured home has produced very kind comments from the staff of the HMA It is representative of the high quality α editorial excellence which everyone expects from House & Home.

CONRAD "PAT" HARNESS, exec vice pres Home Manufacturers Association

US Gypsum's Sheetrock

On page 156 of your October issue our trade name, Sheetrock, appears generically. As I am sure you know, Sheetrock is a trade name of the US Gypsum Co for its brand of gypsum wallboard.

M. P. Reed, publicity manager US Gypsum Co Chicago

More on wood

An important point to remember when working with wood is its natural affinity for moisture. This is the basic cause of warping, checking, grain raising, swelling and shrinking. Moisture also supports fungus growths, rot and decay and stain.

Almost equally important is protection of the wood from termites, powder post (lyctus) beetles, carpenter ants, etc. This can be done with a good preservative which makes the wood toxic. Fortunately preservatives are available which offer both types of protection (water repellency and toxic preservation) in one application.

The manner of treatment or method of application is almost as important as the type of treatment used. For example, it would be foolish to brush treat a fence post which is to be in direct contact with the ground and expect good results. It would be equally foolish to pressure treat siding or millwork or hardwood flooring to high retentions, since such treatment is unnecessarily costly for such purposes, and usually impairs paintability.

H. C. Kennedy, vice president Protection Products Mfg Co Kalamazoo, Mich.

Mortgage coverage

Over the years House & Home has become more and more the "bible of the mortgage lenders." We have found your News roundup and mortgage market quotes interesting and informative. It has become required reading to the majority of the members of our association.

EARLE V. TAYLOR, president Mortgage Bankers Assn of Northern California

Money for criticism

In your November issue, you stated that the Rockefeller Foundation had given the University of Pennsylvania a \$36,000 grant to study the lack of architectural criticism in newspapers and magazines. I'm afraid you've over-endowed the study by \$26,000. The Rockefeller grant was for \$10,000.

GRADY CLAY
Louisville, Ky

House & Home was unintentionally lavish with the Foundation's funds, but the \$36,000 figure came from the Rockefeller Foundation—ED.

Rent certificates

Warren Vinton's speech at the NAHRO meeting in San Francisco suggesting consideration of rent certificates for low income families (Nov, News) calls to mind the reception given by public housers to similar suggestions in Fha's "Handbook on Urban Redevelopment for Cities in the USA" in Nov 1941. This 105 page report was prepared under my direction as assistant Fha administrator. It was made when urban redevelopment was largely the wishful thinking of planners and far-sighted students of urban affairs. At the time it was a milestone, . . . and the major responsibility of Fred Bigger, FAIA, and a past president of AIP with collaboration by the late Prof Henry V. Hubbard of Harvard.

Hubbard, Bigger, and I reached the conclusion that the success of urban redevelopment might depend on finding housing for slum dwellers dispossessed by area improvement and that every possible means should be used to speed relocation. Consequently, we made rather broad and mild suggestions that rental certificates be considered so that no avenue of effective relocation be overlooked.

This so incensed the public housers of that day that Herb Emmerich, Pha administrator made an effort to have John B. Blanford, the National Housing Administrator, suppress the publication. Wiser counsel prevailed and the publication had several reprintings. At the time, feeling between private and public housers was intense, and the extremists in both groups (both equally wrong) fought it out. (Example: the late Herb Nelson of NAREB classifying the late Sen Robert Taft a Socialist because of his (Taft's) moderate approach to housing legislation.)

My felications to Warren Vinton—always an original thinker and one who is honest in expressing convictions—with the regret that his thoughts could not have come 17 years earlier when housing for sub-standard income workers would have been enormously increased by a less arbitrary approach.

EARLE S. DRAPER Bethesda, Md

Fireplace and Chimney Build in as simply as Kitchen Cabinets!

no masonry, no mortar



Majestic Thulman
FIREPLACE and CHIMNEY



Chimney-Quality
GAS VENT

LISTED—by Underwriters
Laboratories, Inc. under
their highest gas vent classification — Type B-Zero.
Needs no clearances, no venrilation Approved for any
gas appliance with flue gas
temperatures up to 550° at
the draft hood outlet. Easy
to install Attractive top
housings!

Majestic Thulman goes all the way to make beautiful fireplaces more practical and economical to plan, to erect, and to enjoy!

Clearances are built-in. Fireplaces can set on wood floor or subfloor. Fireplaces and chimneys can go flush against wood beams, joists, studs or other combustibles — all the way to the roof.

The units are all-metal. No breakage problems. No on-the-job losses or delays. The stainless steel flue liner is rustproof, and acid-resistant — so nearly friction-free you're sure of maximum draft and high capacity.

Hearths can be raised, or at floor level. Any mantel design can be added — of any material or size (marble or black glass surrounds

(marble or black glass surrounds available, which fasten to face of fireplace with mastic). Fireplaces even have built-in sliding screens.

Choice of 30" and 36" fire-

choice of 30" and 36" fireplace opening widths. Chimneys for homes up to two full stories. Chimney top housings in several sizes, and in simulated-brick pattern with choice of colors. Write for full details on Majestic Thulman Fireplaces, Chimneys, and GAS Vents.



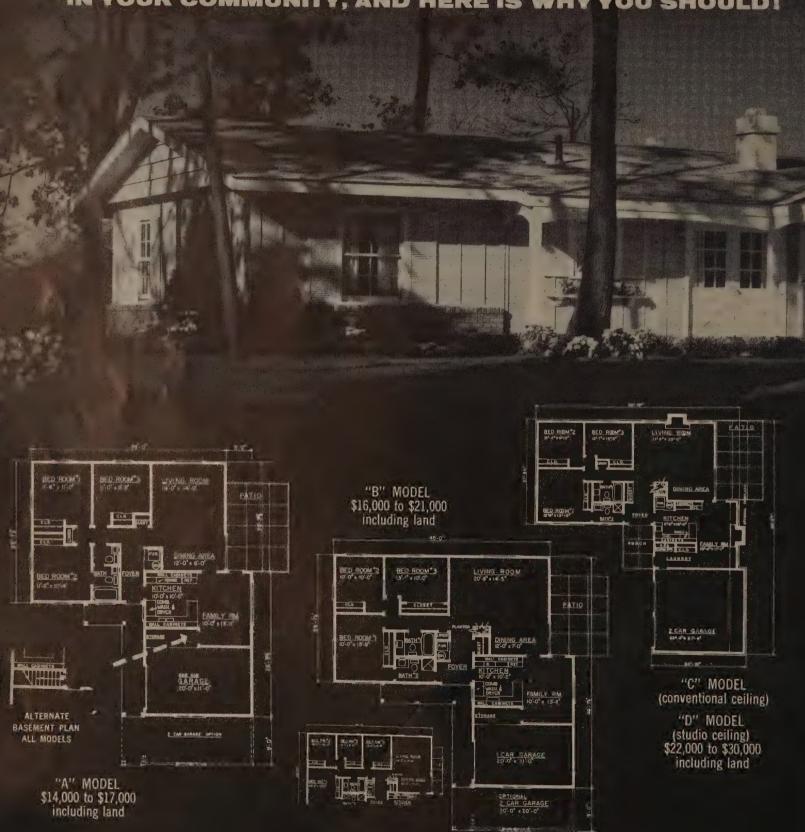
The Majestic

Majestic/Co., Inc. 416-B Erie Street, Huntington, Indiana

THE SCHOLZ MARK 59
"HOUSE OF THE YEAR"

Again, SCHOLZ HOMES and America's leading building industry manufacturers bring to the nation's builders and homebuyers the newest products from their research and development programs presented in the greatest nationwide promotinoal program in the history of home building.

YOU CAN BUILD THIS HOUSE
IN YOUR COMMUNITY, AND HERE IS WHY YOU SHOULD!



THIS PROGRAM IS SO GOOD... YOU CAN'T AFFORD NOT TO BUILD THIS HOUSE!

- 1. 80% construction loan financing, you tie up no cash of your own.
- 2. Priced from \$14,000 to \$30,000 in 3 size ranges. (including hand)
- 3. A buildout cost at approximately \$9 per square foot.
- 4. The most complete program to sell builders' houses in the history of home building outlined on following pages:



THE Mark 59
PROVIDES

"America's most exciting homes" require the dramatic, clean lines, the rich custom styling of America's most distinctive garage doors . . . by Crawford, of course. For Crawford offers a door model to harmonize with every style



of architecture, custom design to enhance any decorative motif, a size to fit any opening. Add to this eye-appealing beauty a smooth, silent, effortless action that makes a Grawford door a pleasure to operate, and you can readily appreciate why Crawford garage doors were selected for the "House of the Year"... and why Crawford should be your choice too.

SCHOLZ HOMES are now available everywhere in the United States from one of eight plants near you. CALL, WIRE or WRITE us in Toledo immediately.

The Mark 59 will also be on display at the Chicago Show. See us there. 3rd floor Hilton.

Scholz Homes Inc., 2001 N. Westwood, Toledo 7, Ohio, Phone JE 1-1601

Please forward a copy of the new SCHOLZ DESIGN COLLECTION
and have your field representative call on me to explain the
Scholz Project Participation Program.

BUILDER'S NAME (please print)

ADDRESS (please print)

CITY H-H, J STATE PHONE NO.

THE SCHOLZ

WOUNGS OF THE YEAR*

YOU CAN BUILD THIS HOUSE...
IN YOUR COMMUNITY, AND HERE IS WHY YOU SHOULD!

1. 80% construction loan financingyou tie up <u>no cash of your own!</u>

THE Mark 59

leatures
the products of:



The comfort and convenience of modern, trouble-free living is additionally assured with ALWINTITE Aluminum Sliding Windows by General Bronze Corporation Windows which are recognized by builders and home owners for their many "PLUS VALUES".

Carefully designed and precision made, they offer visible evidence of quality construction. Flash-welded frames give extra strength and rigidity to these easy-slide windows.

Home buyers also appreciate their fine performance and beautiful appearance. The name and reputation of General Bronze for quality building products stands behind every ALWINTITE Window.

MASONITE CORPORATION

Here are exterior walls that will remain carefree in so many ways, year after year. With today's exciting range of materials—like the Masonite® Siding products you see here—all the old limitations are off. The way is cleared for your home to express more of you... to boast a personality all its own.

There's no thought of splits, splinters or cracks—now or ever.

These hard, dense panels take paint like a dream...stand up
to wind and rain...require so little up-keep you'll find it hard
to believe. A truly fine contribution to the modern carefree manner of living are these fresh new siding products by Masonite.

THIS PROGRAM IS SO GOOD YOU CAN'T AFFORD NOT TO BUILD THIS HOUSE!

2. Priced from \$14,000 to \$30,000 in 3 size ranges.



JOHNS-MANVILLE



ASPHALT ROOF SHINGLES

A superior asphalt shingle—gives full protection against the weather—furnished in colors of distinction that add to the luxury look of the Mark 59 Home.



WEATHERTITE SHEATHING

Adds structural strength to the home. Its high insulating qualities help keep the home more comfortable . . . reduce heating and cooling costs.



PRE-PRIMED ASBESTOS FLEXBOARD

Provides attractive exterior walls in authentic board and batten styling. Made of two minerals, Flexboard is rotproof, weatherproof and fireproof. THE SCHOLZ Mark 59

YOU CAN BUILD THIS HOUSE
IN YOUR COMMUNITY...AND THIS
IS WHY YOU SHOULD!

3. A buildout cost
of approximately
\$9 per sq. ft.



Mark '59 model home or another exciting model home, cover every inch with the beauty Celanese contemporary fibers can give. Drape the walls with fabrics of Celanese acetate for extra richness; use Celaperm draperies for colors that keep their clear beauty; let Fortisan provide the ultimate in elegance at the windows. Put Celanese Celaire, the new "life-set" twist carpeting used by leading manufacturers, over every inch of the floor to insure carpeting that is the epitome of luxury at a down-to-earth price.

Celanese® Celaperm® Fortisan® Celaire®

BROYHILL Premier

Furniture by Broyhill Premier brings high fashion and a distinctive degree of prestige to this room in the Mark 59 "House of the Year". This style is one of several represented in the distinguished Broyhill Premier collection of correlated groupings for living, dining, bedroom and random areas in the home, and each style offers a

choice from more than 100 color-fabric combinations created exclusively for Broyhill Premier by leading color authorities. Advertised to millions in <u>Life</u>, <u>Look</u>, <u>Living</u>, <u>Seventeen</u> and <u>Parade</u>, and made by one of the world's largest furniture manufacturers.

YOU CAN'T AFFORD NOT TO BUILD THIS HOUSE!

- 4. OVER 13½ MILLION prospective home buyers will see your model locations with major story and advertising sections in:
- · McCALLS
- · LIVING
- HOUSE & GARDEN

PLUS, local break announcements on NETWORK TV SHOWS

THE Mark 59

Virden Lighting adds the happy combination of beauty, comfort and safety throughout the interior of the dramatically new Mark 59...creates night-time beauty on the exterior too.





Handsomely styled, high-quality Virden Lighting in both contemporary and traditional designs compliment and add to the fine over-all Mark 59 decorative scheme. Provides, too, the necessary high level general lighting . . . dramatic feature lighting and concentrated localized lighting required to make this truly the "House of the Year".

Virden Lighting offers a complete selection of home lighting as well as fluorescent equipment for commercial and industrial use. For free catalog, write to the John C. Virden Company, Dept. SH, Cleveland 3, Ohio.

A TRIUMPH OF LOCK DESIGN . . . "First in fashion, finest in function",
Sargent Residential Hardware combines simple, classic lines and rich
decorative effects with lasting security. There are knobs, roses and finishes
to suit the personality of every room. Available in gleaming brass, rich bronze,

aluminum or chrome, with personalized and high-styled roses.



SARGENT & COMPANY
HARDWARE MANUFACTURERS
Sargent Locks . . . "sign of a well built house"

THE SCHOLZ MARK 59

YOU CAN BUILD THIS HOUSE IN YOUR COMMUNITY ... AND THIS IS WHY YOU SHOULD!

5. The complete magazine feature story decorating package made available at cost and financed by Scholz Homes.



the general electric medallion kitchen

Hardly a woman can pass up this breathtakingly beautiful kitchen . . . especially designed for the Scholz home. Step-saving, work-saving, electrical servants that change chores into leisure . . . offer convenience unlimited to the housebuyer.

New G. E. "Straight-line" appliances give you the look of built-in kitchens without built-in expense. A General Electric Range, with 21 inch master oven, makes cooking a breeze... fast, clean and safe. A G. E. Straight-line design Refrigerator fits flush against the wall and

lines up at front with cabinets for that built-in look. And the sink center comes complete with a G. E. undercounter Dishwasher featuring the Flush-away Drain . . . and a Super-Grind Disposall® that grinds and washes food waste away before it has a chance to become garbage!

All this, plus the Filter-Flo® Washer and Matching Clothes Dryer in a handy utility room.

Truly here's a kitchen that puts your house prospects in a buying mood . . . A General Electric Advance Design Kitchen

Progress Is Our Most Important Product





Here is the ultimate in flooring luxury and durability.

Enhancing any decor, Amtico Vinyl Flooring
helps create handsome and distinctive settings.

Quiet and comfortable, it provides a lifetime of beauty
and wear . . . always looks new with so little care!

Amtico is all-vinyl . . . colors go through each tile.

There is no finer flooring on the market!

THIS PROGRAM IS SO GOOD ... YOU CAN'T AFFORD NOT TO BUILD HOUSE!

6. Direct contribution to your advertising program from the half million dollar fund set up by participating manufacturers

7. Support of your advertising program by your local department or furniture store and utility companies.



Universal 4 Rundle

This beautiful new Mark 59 "House of the Year" has been made even more eye appealing with the installation of Universal Rundle bathroom fixtures. These lovely trend-setting fixtures by Universal-Rundle, are the tatest in design. Scientifically color-matched fixtures . . , with gleaming, enduring lustre ... scratch, chip and stain-resistant. Here are lavatories with generous counter surfaces and anti-splash rims; expansive yet compact, balhtubs; water closets that operate ever so quietly.

For more than half a century Universal-Rundle has developed new and better ways to make U/R bathroom fixtures more beautiful, more efficient. more lasting. They're your assurance that you are using the World's finest bathroom fixtures.

features the lush splendor of genuine Formica® laminated plastic.

On Vanitory and walls the very newest and prettiest of Formica®

patterns called White Sequin assures long years

of wear with only damp cloth care.

Formica® is unharmed by boiling

water, never requires finishing.



THE SCHOLZ

AGAIN FEATURES

Thermopane



Ever since using it in a new home he built for himself over 10 years ago, Don Scholz has been sold on genuine L.O.F Thermopane insulating glass. In the Scholz Mark 59, as in all its predecessors, Thermopane is again a star feature in this gable window wall.

Television and magazine advertising and ever broadening use of Thermopane have made it widely known and universally wanted. Everyone visiting your Mark 59 model home will know Thermopane means warmer in winter and cooler in summer... protection from drafts and reduction of fogging... lower cost heating and air conditioning.

Another terrific Scholz feature!



Thermopane
INSULATING GLASS
LIBBEY OWENS FORD
TOLEDO 3. OHIO

a Great Name in Glass

Letter from The Publisher



Editors Ryan & Treder:

Walter Daran

What will women want in the sixties?

Dear Subscriber:

The girl at the left in the photo is Kathryn Morgan-Ryan, whom you may recognize as the writer of our big Oskaloosa story (H&H March '58). On the right is Paula Treder. She is an architect and House & Home's only other woman associate editor.

This month these two teamed up to do our "cover story"—an exciting forecast of what will be different about life in the 1960's, and how these changes are likely to affect you and everyone else in the housing industry. (The story begins on page 104.)

The idea for the story was Paula's; and she and Kathy have been at work on it since last September—traveling, interviewing, collecting facts and figures, opinions and predictions. They talked or corresponded with over 100 planners, economists, sociologists, and statisticians from Maine to California. They searched for data in universities, government bureaus, and in industrial research centers. Kathy attended two women's conferences on housing, listening for the views that would give her a clue to what consumers are thinking about, planning—or just plain hoping—for the future.

They gathered so much material they were soon faced with a problem the housing industry hears so much about: the need for storage space for the massive collection of records and reports that spilled across their desks.

The two girls make a fine team with complementary talents that stem from their varied backgrounds. Paula recently added a license to practice architecture in New York to the one she already had in Illinois. A corporate member of AIA, she graduated from the University of Illinois with a degree

in architecture, then went on to earn an Ms there. She worked in architectural offices in Illinois and New York City. For two years she was on Harold R. Sleeper's staff and helped prepare the current edition of *Architectural Graphic Standards*. She became one of our editors in June, 1956. She keeps her hand in active design work, is now doing two beach houses as well as working on a children's book on architecture.

Kathy graduated from the University of Missouri's famed School of Journalism, worked summers on Midwest newspapers. From the time she was 16 she earned her pocket money by selling short stories and articles—even had a play produced which is still used by college drama workshops. She moved from *House & Garden* to House & Home four years ago. She is married to another writer, free lancer Cornelius Ryan, a former senior writer on *Colliers*' who is now doing a book on the Normandy invasion. They have two small Irish children with Anglican names, Geoffrey and Victoria.

Like every other story in House & Home, Paula and Kathy's report on the 1960's is a product of group journalism. This means that several other staffers gave it an assist on its way to you, but the big job was Kathy's and Paula's. I look forward to hearing how you liked it.

Sincerely,

Terry breadice

Editor & Publisher



Two Ways to Make More Sales ...

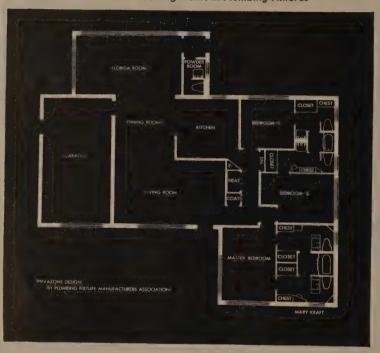


RHEEM-RICHMOND



How Privazoning works:

above, usual three bedroom arrangement; right, The Privazone version of same house, same space.



Of course you recognize the tremendous sales potential of Privazoning...the new space concept that gives each family member a private retreat for relaxing, bathing, dressing. Privazoning multiplies your market, literally!

And Rheem-Richmond fixtures fit in superbly with this modern trend that means more comfort for the homeowner, more profit for you. Their advanced styling invites the decorator's art. Their range of seven sparkling colors and exclusive "Whiter-White" makes possible a different color-key for each Privazone area. And high quality is taken for granted in all Rheem-Richmond's wide variety of sizes and styles. Write for detailed information.









SEE RHEEM-RICHMOND'S EXHIBIT, WITH PRIVAZONING-NAHB SHOW, CHICAGO



RICHMON

RHEEM MANUFACTURING COMPANY METUCHEN, NEW JERSEY

EDITOR-IN-CHIEF Henry R Luce PRESIDENT Roy E Larsen

> EDITOR & PUBLISHER P I Prentice

MANAGING EDITOR Robert W Chasteney Jr

EXECUTIVE EDITOR Carl Norcross

ASSISTANT MANAGING EDITORS

John F Goldsmith Walter F Wagner Jr

NEWS EDITOR Gurney Breckenfeld ART DIRECTOR Jan V White

ASSOCIATES

Edward Birkner, James P Gallagher David R Kerr, Kathryn Morgan-Ryan Robert W Murray Jr

Richard W O'Neill, Arthur David Piper John Senning, Robert Seaver Richard Saunders (Washington) Clifford S Smith, Paula Treder, AIA

ASSISTANTS

Marcia Frank, Peggy Lampl Natalie F Siegel, Olive F Taylor Jenepher Walker

CONSULTANTS

Carl Boester, Miles L Colean, FAIA Thomas P Coogan, Ruth Goodhue James T Lendrum, AIA, David C Slipher

> PRODUCTION MANAGER Lawrence W Mester

CIRCULATION MANAGER William L Taylor

BUSINESS MANAGER Archibald Peabody Jr

DIRECTOR OF MARKETING Arthur S Goldman

ADVERTISING DIRECTOR Richard N Jones



Volume XV, No. 1

HOUSE & HOME is published monthly by TIME INC. Time & Life Building, 9 Rockefeller Plaza, New York 20, N. Y. Yearly subscription payable in advance. To individual or firms (and their employes) engaged in building -design, construction, finance, realty; material distribution, production or manufacture; government agencies and supervisory employes; teachers and students of architecture and trade associations connected with the building industry; advertisers and publishers; U.S.A., Possessions, Canada, 36.00; elsewhere, \$9.50. Single copies, if available, \$1. All copies mailed flat. Please address all subscription correspondence to HOUSE & HOME, 9 Rockefeller Plaza, New York 20, N. Y. When ordering change of address, please name the magazine and furnish an address label from a recent wrapper, or state exactly how the magazine is addressed. Both the old and the new address are required. Allow four weeks for the change. © 1959 by TIME INC. All rights reserved

TIME INC. also publishes TIME, LIFE, FORTUNE. SPORTS LLUSTRATED and ARCHITECTURAL FORUM. Chairman, Maurice T. Moore; President, Roy E. Larsen; Executive Vice-President for Publishing, Howard Black; Executive Vice-President and Treasurer, Charles L. Stillman; Vice-President and Secretary, D. W. Brumbaugh; Vice-Presidents: Edgar R. Baker, Bernard Barnes, Clay Buckhout, Arnold Carlson, Allen Grover, Andrew Heiskell, C. D. Jackson, J. Edward King, James A. Linen, Ralph D. Paine Jr., P. I. Prentice, Weston C. Pullen Jr.; Comptroller and Assistant Secretary, John F. Harvey.

STORY OF THE MONTH

104 How the big change of the 1960's will affect you

DESIGN

145 AIA announces its 4th Annual Homes for Better Living Awards

A new house by Architect Mario Corbett 148

EDITORIAL

142 Trade-in and trade-up-\$100 billion key to better homes for everybody

BUILDER STORY

114 The 1959 Research Houses show you new ways to build today and tomorrow

HOME SHOW

151 Here are 254 new products worth your careful inspection

ROUND TABLE

132 Plastics in home building—the break through may come sooner than you think

PREFABRICATION

How to design for today's market 137

MERCHANDISING

Here's how you can get in on a 1959 "magazine house" promotion 146

NEW WAYS TO BUILD BETTER

171 Showcase

194 Technology: Research develops low-cost domes of 2x4s and plywood

What the leaders are doing 200

232 Reviews of new technical literature

NEWS

What 15 leading builders are planning for 1959 Mortgage discounts show signs of shrinking again Is federal aid to urban renewal aimed at the wrong problem? Pact with single, industrial union boosts productivity in Fresno

Index to these and other News reports 37

DEPARTMENTS

90 Letters

Advertising Index 238



Design: H&H Staff Photo: Jack Wilson



America's exploding population will bring on

The Big Change of the 1960s

At eight minutes past 11 on the morning of Friday, Oct 17, 1958, the population of the US stood at exactly 175,000,000.

And, according to new projections just completed (Nov '58) by the Bureau of Census, the population may reach 181.2 million next year, 199 million by 1965, and 219.5 million by 1970.

So in the decade starting next January the US may add more than 38 million people—just about as many as there were in the whole country in 1870.

Up to now we have been underestimating the future

Until Census released its new figures, it was projecting almost two million less people than it now projects for next year, six million less than it now projects for 1965, and ten million less than it now projects for 1970.

Census makes its projections—not to be construed as forecasts or predictions—at four levels. In this report House & Home is using the highest current projection. The lowest puts the future population at 179.4 million next year, 191.5 million by 1965, and 202.5 million by 1970.

Even on the basis of the lowest projection, we are on the threshold of a decade of great change. For example:

The three-week vacation will be standard for white-collar workers. But don't expect the four-day work week.

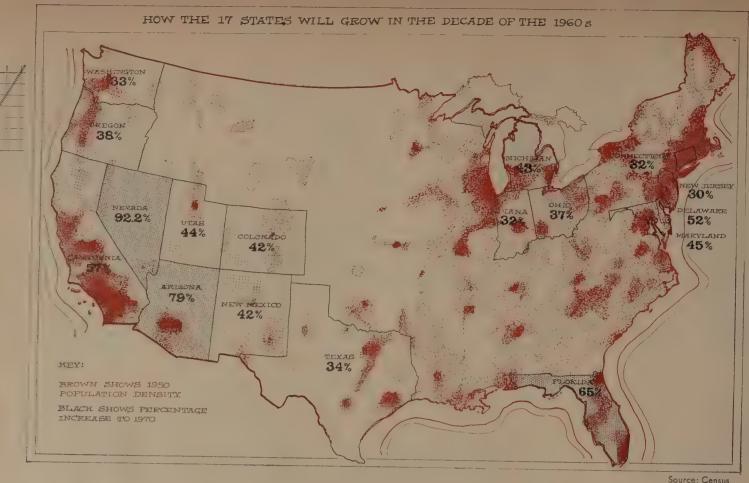
Air travel will boom—domestic air lines will log roughly 60 billion miles a year by 1970, almost three times more than in 1956. But don't expect to see everybody commuting by helicopter.

Electronic cooking will be a commonplace. But don't expect to see push-button house cleaning.

Some houses will get their light and heat from nuclear energy in the late 60's. But don't expect nuclear-powered automobiles.

Biggest news will be the people themselves

Where will they live? How many children will they have? How many of them will be in school? How much will they save? How many will be working? How much new housing will they need? What kind of housing will they want? For a close look at the booming population of the 1960s, turn the page.

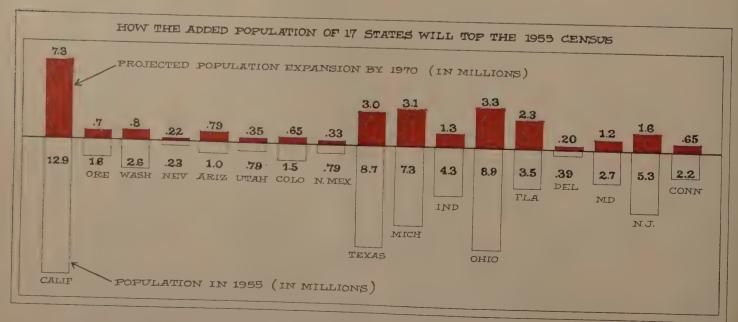


Half the population gain will be concentrated in 17 fastest-growing states

These key states will account for 27.6 million of the nation's total expected population increase of 54.2 million, according to Census projections.

The map identifies these states, shows that the greatest percentage gains in population will occur in Nevada (its now-tiny population will increase 92%), in Arizona (79%), in Florida (65%), and in California (its already huge population will increase 57%).

The graph (below) tells you the expected population gain for each of these states, shows that the greatest numerical gains in population will occur in California (its population will increase 7.3 million-much more than any other state's), in Ohio (3.3 million), in Michigan (3.1 million), and in Texas (3.0 million).



The big reason for the projected growth of midwestern states like Ohio, Michigan, and Indiana is the St Lawrence Seaway. But despite the effect of the Seaway, and despite fast-growing Long Island, New York State is likely to lose its crown as the state with the biggest population. By 1970, California is expected to have 20 million people, 273,000 more

than predicted for New York.

By 1975, New Jersey will probably have the highest population density—about 976 people per sq mile.

And most experts expect Alaska to grow, though 1960-70 figures, that take statehood into account, have not yet been projected.

Here are the growth areas to watch in each of the 17 states*

Arizona: Maricopa and Pima counties.

California: a belt extending from San Francisco inland to Sacramento, then to Fresno, Los Angeles, San Diego.

Colorado: Denver metropolitan area, Colorado Springs.

Connecticut: all counties, especially Fairfield (which is within commuting range of New York City).

Delaware: New Castle and Kent counties.

Florida: Tampa Bay, Miami, Ft Lauderdale. Indiana: Allan, Lake, Marion, and St Joseph

Maryland: Montgomery, Prince George's, Baltimore, Anne Arundel, Cecil, St Mary's, Howard, Herford, and Charles counties.

Michigan: Berrien, Genesee, Ingham, Jackson, Kent, Macomb, Muskegon, Oakland, and Wayne counties.

Nevada: western Nevada, Las Vegas-Henderson area.

New Jersey: Burlington, Middlesex, Monmouth, and Ocean counties; all metropolitan areas, Delaware Valley.

New Mexico: areas around Albuquerque, Los Alamos, Santa Fe.

Ohio: Franklin county, Montgomery and surrounding counties, northeast counties.

Oregon: from Salem to Portland and up to Washington border.

Texas: areas around Houston, Galveston, Ft Worth, Dallas.

Utah. Salt Lake, Ogden, Wasatch Front area. Washington: from Seattle to Tacoma and down to Oregon border.

*HOUSE & HOME compiled this list by surveying government bureaus in each of the 17 key states.

The coming-of-age "war babies" will be a dynamic force in our expanding population

In the 1960s young people, age 18 to 24, will be the fastest growing segment in our population. (See chart, p 109.)

Next year they will number 16.2 million. By 1965 the total will be 20.2 million and by 1970 it will reach 24.9 million—a ten-year jump of 54 per cent.

These young people are the crucial factor in the population.

For most of them—even for many who are still students—these are the years of marriage.

The typical young woman of this generation will be married when she is about 20. (The median age of women marrying for the first time has declined steadily over the years—from 22 years old in 1890 to about 20.1 now. Census projects that the median age will drop to 19.7 by 1975.)

The potential of these young adults is nothing short of breathtaking. Most babies are born to women between the ages of 20 and 24. Although the number of births is not predictable with complete accuracy, there may be as many as 48 million babies born in the next ten years. That's an average of nearly 5 million births a year and compares with an average of 3.75 million in the decade 1935-45.

The biggest numerical growth will be in youngsters and oldsters

In 1960 there will be 81.5 million people above 64 or below 18 years old. That is more than the nation's whole population at the turn of the century.

By 1970, the oldsters and youngsters, together, will number 104 million and represent close to half the population—47% to be exact. To see how fast the make up of the population is change, look at 1950: people over 64 and under 18 totaled only about 59 million and made up only 40% of the population.

In the 1960s the retirement-age group will grow from 16 million to 19.5 million. That is twice as many oldsters as

there were in 1940. Although life expectancy is increasing for both men and women, men will continue to have a shorter life span. You will see many more women in this age group living alone or as heads of households in the 1960s. By 1970, nearly 12% of all households will be headed by single or widowed women.

In the 1960s the school kids, 5 to 17, will increase in number from about 45 million to 58 million, and their younger brothers and sisters will gain from 21 to 26.5 million. In 1955, children under 18 accounted for only a third of the total population. By 1970 they will make up almost 40%.

In the 1960s, the workers will form a smaller percentage of the population

There will be more people of working age than today, but year by year they will drop in proportion to the total population. The vast majority of skilled workers—in almost every field—are found in the 25 to 65 age group.

Here are some figures that point to a relative shortage ahead in the effective labor force:

In 1955, the 80.4 million men and women aged 25 to 65 represented nearly 49% of the total population.

Next year the 83.4 million in this group will represent only 46% of the total.

In 1965 there will be 86 million of them—43% of the total—and by 1970 Census projects a total of 90.5 million, but only 41.3% of the whole population.

The problem will be complicated, too, by this factor: five out of six of the 7 million more people in this skilled-labor group will be 45 to 65, only one in six will be 25 to 45.

For a preview of incomes, see next page



Income of the "typical family" will jump 34% in today's dollars

Today's typical family has an annual income of about \$4,850. By 1970, its income will be about \$6,500 in 1959 dollars, says the Research Institute of America.

This 34% increase in income will be possible because we will be producing more:

1. The Gross National Product is expected to increase at least 20% between 1960 and 1970. The GNP will be close to \$500 billion by 1960; should reach \$600 billion by 1970, the Research Institute believes.

2. The productivity rate of industrial workers is expected to increase at least 30% by 1965. According to Dr Philip M. Hauser, head of the department of sociology at the Uni-

versity of Chicago and one-time deputy director of the Census, the average productivity rate (GNP divided by the number of manhours worked per year) is now about \$3.29 per man-hour; should reach \$4.26 by the mid-'60s. (This is probably a faster gain than industrial wages will make, because much of the gain in productivity will result from increased mechanization.)

Even after taxes, consumers will have much more to spend in the 1960s

Consumer income after taxes (disposable income) will be about \$335 billion next year; about \$450 billion—not allowing for price increases—by 1970, says the Research Institute.

"Since the population will increase only about 20% in this same period," says the Research Institute, "this necessarily indicates a substantial rise in the standard of living.

"Considering past patterns of consumer spending, and the changing population pattern, it is inevitable that a larger proportion of this larger income will go into what economists call 'discretionary spending'—homes, house furnishings, automobiles, recreation, travel, etc."

Is there a debt joker to be balanced against the projected rise in income? No, says Arno H. Johnson, vice president and senior economist of J. Walter Thompson Co, a leading advertising agency.

"Some have worried that, with the rapid increase in consumer debt, the fixed commitments of consumers would grow to the point where uncommitted income would narrow dangerously and cut down on purchasing ability. Actually, as of the first quarter of 1957, the level of uncommitted personal income (after taxes and fixed commitments) had grown to \$201.5 billion—four times the \$48.6-billion level in 1939."

More and more families will be moving into higher income brackets

By 1960, 60% of all families will have a disposable income of over \$4,000; 38% will have a disposable income over \$5,000; 11% will have a disposable income over \$7,500, according to estimates by Arno Johnson.

These percentages are a sharp, four-year rise over the

1956 figures. In 1956, only 46% had a disposable income over \$4,000; only 26% had a disposable income over \$5,000, only 9% had a disposable income over \$7,500.

This rise is of the greatest importance to the housing industry because . . .

The higher a family's income, the more likely it is to own its own home

In 1957, according to the Research Institute of America:

48% of the families in the \$4,000 to \$5,000 income group (before taxes) owned their own home.

63% of the families in the \$5,000—7,500 income group owned their own home.

73% of the families in the \$7,500—10,000 income group owned their own home.

76% of the families in the over-\$10,000 income group owned their own home.

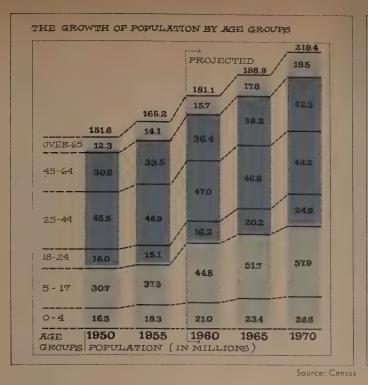
So, as income rises during the 1960s, there is every indication that the percentage of families owning homes will climb with it.

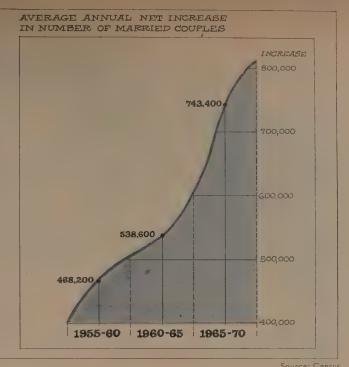
By the mid-'60s we may need as many as 1.5 million new housing units a year

The coming boom in housing should break all records set by the post-war boom.

The upswing may reach boom proportions as early as 1963—if not that soon, probably not much later than 1965.

Spurred by steadily rising consumer incomes (see above), the big, upward thrust in housing starts will break through as fast as the children born during World War II





(and their younger brothers and sisters) start maturing, marrying, and entering the housing market.

Family formations are now running at a higher rate than a few years ago. The rise will continue next year and accelerate during the whole decade. As the chart shows, the total number of married couples in the US has been increasing an average of 468,200 each year since 1954. In the first half of the '60s average annual net is projected at 538,600. It will jump to 743,400 the second half.

Reinforcing these marriage figures are the millions of young people who will reach 18 to 24 during the 60s. Next year there will be 16.2 million in this age bracket (only 900,000 more than in 1955). But in five more years—by 1965—the 18-to-24-year-olds are projected at 20.2 million, and by 1970 at just short of 25 million. (See chart, above, and p 107.) Millions of young married couples are

not the only reason for anticipating a housing boom in the 1960s. Other reasons include: 1) strong and steadily increasing demand from millions of prosperous families who want to trade up to a better house; and 2) growing demand for new housing to replace all the units that will be demolished to make way for the new highways, urban renewal, slum clearance, and commercial and industrial buildings.

Experts disagree on the year when the combination of these factors will drive new housing construction to record levels.

Harry Held, vice president of New York's Bowery Savings Bank says: "Starting in 1963, it is forecast that the annual rate of housing production will have to be increased to a possible minimum . . . of 1.5 million per annum."

Other economists like Dr George Cline Smith, vice president of F. W. Dodge Corp, think the really big jump in housing starts will not come before 1968. Dr Smith predicts 1,430,000 units that year. He does not expect to see 1.5 million starts earlier because, he believes, typical homebuying

couples are in their early thirties, so World War II "war babies" will not come into the market until the 1970s. But Dr Smith notes a strong possibility of new steps by the government to make it easier for younger couples to buy houses. If so, starts would pass the 1.5 million mark earlier.

A big step-up in housing starts could begin as early as next year

Housing's No. 1 Economist, Miles L. Colean, last Fall forecast: 1) 1,215,000 starts for this year; 2) a steady market for 1.2 million—possibly 1.3 million—units a year through '62 or '63, 3) a substantial increase about '64 (H&H, Sept '58).

And, Colean now believes, the market could do much better than he originally predicted, *provided* five big "ifs" turn out right. Here are the five "ifs" that will determine the number of starts in the early '60s:

1. If mortgage conditions are favorable . . .

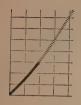
2. If prices are held to levels people will pay . . .

- 3. If builders build the quality and type of house people want . . .
- 4. If trade-in financing makes trade-up practical . . .

5. And if our economy stays in good shape.

If all these conditions are met, Colean believes there is a market potential of 1.4 to 1.5 million new housing units every year in the early 1960s.

If this potential is realized, Colean then predicts a market potential of 1.6 to 1.7 million starts a year when the "war baby" generation enters the market in the later '60s.



And we'll need different houses - - not just more houses

In the 1960s the changing patterns of our population will have an effect on the kind of houses you design and build:

1. We'll need bigger houses for the growing number of families with two to four children

Here's statistical projection from Census showing how family size will increase in the years ahead:

2.91 children will have been born by 1970 to mothers who were 30 to 39 in March, 1957.

3.79 children will have been born by 1980 to mothers who were 20 to 29 in March, 1957.

4.13 children will have been born by 1985 to women who were 15 to 19 in March, 1957 (the young adults of the early 60's). By contrast:

2.29 children were born to women who had reached 40 to 49 by March, 1957, and had completed childbearing.

These larger families of the 1960s will need three, four and even five bedroom houses.

They will consider the family room a necessity and they will want some provisions for adult privacy and quiet.

They will find outdoor living and yard space more important than ever, as family activities spill out of the house and all over the lot.

2. We'll need better houses for the growing number of families able to trade-up

As incomes rise throughout the 1960s, more and more people who are already home owners will be in a position to buy more expensive houses.

But these higher-income families will not trade-up unless they are offered better-quality houses. They will want better designs, more workable plans, better materials and equipment. They will want more variety—as opposed to lowerpriced, look-alike houses—better neighborhoods, more community planning.

Right now, says Homebuilding's No. 1 Economist, Miles L. Colean, there is a shortage of more than 15 million better homes that people could now afford to buy on their present incomes. This shortage of quality homes is even bigger than the shelter shortage after World War II. And this shortage could become acute in the 1960's, as more and more people climb the income ladder.

3. We'll need special house types for the growing number of older and younger couples

We'll need more housing for the young adults who will make up the bulk of more than 3 million marriages from 1965 to 1970.

By all past indications, these young married couples won't be doubling up with their inlaws. In 1958 only 3.1% of all married couples in the US did not maintain their own households. In 1948 the percentage was 7.2, and most of the decline in the doubling occurred before 1952.

You can plan on many of the young adults renting apart-

ments—garden or high-rise during the first few years of their married lives. Others will be in the market for good used houses and will then trade up as their incomes grow.

We will also need more housing to fit the special requirements of our senior citizens in the 1960s.

Older people will want smaller, more compact houses and garden apartments. And even in this group, the two-bedroom house will be the minimum since older people will want extra space to sleep visiting children and grandchildren.

4. We'll need to plan our houses for more family-centered, leisure-time activities

Ever since the end of World War II, leisure-time activity—especially in the burgeoning suburbs—has been increasingly centered around the home and family life.

There will be more—not less—emphasis on home-centered activities in the 1960's, as Americans intensify their demands for the bigger, better houses their larger incomes will allow

them to buy. So the home-centered houses of the 1960's will have to have plenty of accessible space for outdoor living, plenty of storage for all the tools and records and books and outdoor equipment people will buy, and plenty of indoor recreation space for the TV viewing, reading, and relaxing that families will enjoy together.

More and more people will be crowding into 180 metropolitan areas

And that is where the great majority of new housing units will be built in the '60s.

Seven out of ten new units now go up in the metropolitan areas, according to the Bureau of Labor Statistics. These big population centers will gain an even larger share of the new housing in the '60s when they will account for a higher percentage of the total population.



SUBURBAN STREET SCENE is typical of better communities in the fast-growing New York metropolitan area.

Census defines the metropolitan areas as 180 counties, or groups of counties, with at least one city of 50,000 or more.

population and they are growing faster than the rest of the country. They grew almost 19 million, 1950-57, which almost These 180 areas already have more than 60% of the total equals the total US population growth for those years.

Metropolitan areas are growing two ways-in population and in land area

A Rockefeller Fund study estimated a year ago that about a million people are leaving farms and migrating to the cities each year.

Only about one-eighth of the population still lives on the farm. The farm population today is about what it was 100 years ago. Fewer and fewer farmers are able to produce all farmers can do it on less and less acreage.

the food needed by our growing numbers of people-and thanks to modern fertilizers, mechanization, and techniques,

As more and more people spill into the cities and their suburbs, more and more of the land itself is added to the total metropolitan area.

Only last month Census found that the number of metropolitan areas has increased from 174 to 180. Census also found that eight of the former 174 areas had spread out into new counties.

Some metropolitan areas are sprawling—into vast linear "megalopolises"

Gaps between major cities are filling up with homes, industry, and smaller cities. In some cases, the sprawling metropolitan areas are linking up with each other to form huge linear cities.

This urban sprawl can be observed in most parts of the US. Most frequently cited is the so-called 600-mile urban area with 34 million people between Portland, Me. and Norfolk, Va. Other major linear cities are in the San Francisco-Los Angeles area, from Detroit to Cleveland, in New York's

Mohawk Valley between Albany and Buffalo, and along much of Florida's east and west coasts.

Says Alvin Hansen, Harvard professor of economics: "The tidal wave [of metropolitan growth] will throw up economic, fiscal, and social problems, the magnitude of which we have scarcely yet caught a glimmer. Unfortunately, the US is peculiarly unfitted by temperament and historical background, and by our obsolete, balkanized network of multiple local governments, to face this problem.

In the metropolitan areas, the suburbs will grow faster than ever

Between 1957 and 1975 the population of the suburbs will grow twice as fast as the country as a whole. By 1975, 41% of all the people in the US will live in suburbia.

In the central cities, population is rising little or not at all. Arrivals to the cities have just about matched the departures for the suburbs. Yet some housing will continue to go up in the cities. There is a growing need for garden apartments and other units for older citizens and the newly married (see opposite page). Slum clearance and housing for minorities will account for other new city units.

All signs point to a continued high rate of home building in the suburbs. In nearly every metropolitan area, new expressways are making it easier for today's automobile owner to commute to the city.

And further impetus to new housing in the suburbs is coming from the trend of industry—particularly light manufacturing-to follow the move outward from the city. Says M. J. Murphy, editor of Factory Management & Maintenance: "The trend of new plant construction from city to suburbs is overwhelming. 80% to 90% of plants employing over 100 people are now built outside city centers."



It may not be easy to find the labor for all the new housing we will need

Every year during the 1960's skilled labor will form a smaller part of the population.

The 25-to-65 age group which supplies almost all our skilled work force is growing in total numbers—but only a third as fast as the non-productive segments of the population. The skilled-labor age bracket made up 48.7% of the population in 1955, will be down to 46.1% next year and only 41.3% in 1970 (see p 107). And this 25-to-65 age group will be called on to produce almost all the goods and services needed to provide a rising standard of living for 20% more people.

Automation will make up for some of the labor shortage—

but not all of it. For, experts say, costly automated equipment makes economic sense only in mass-production industries.

So there will be a sharp increase in competition for skilled labor in the '60s. In the manufacturing industries labor is expected to increase both its productivity and its earnings (see p 108). To attract workers, other industries—including housing—will have to raise wage rates, too.

Can housing afford to raise its wage rates to get all the workers it will need for the housing boom of the '60s? Probably not, unless housing—like the manufacturing industries—takes full advantage of new and advanced technologies to make its labor more productive.

It certainly will not be easy to find mortgage money for all the new housing we will need

By 1965 the demand for mortgage money is expected to top \$50 billion a year.

Not more than about \$30 billion can come from mortgage pay-offs—so more than \$20 billion a year will have to come from other sources. This estimate is by the industry's top economist, Miles L. Colean.

To grasp the full import of the problem, compare this \$20 billion a year with today's \$7 or \$8 billion annual increase in mortgage debt.

In the expanding economy of the 1960's, other industries will be competing with housing for money to finance plant modernization and expansion. (Industry needs an average investment of \$12,500 to create just one new job for one

new worker.) And federal, state, and local governments will also be in the money market to borrow for schools, hospitals, roads, water systems, and many other facilities.

Fortunately, we can expect total savings to rise and increase our supply of capital during the 1960's. Economists point out that in periods of increasing productivity the rate of personal savings also increases. From 1938 to 1956 it more than doubled.

Arno Johnson, economist and vice president of J. Walter Thompson Co says: "By 1969, a production level of \$700 billion and personal consumption of \$435 billion would make possible an expansion of personal saving to over \$35 billion, or more than 80% above the \$19.2 billion saving in 1958."

And land for all the new housing will be even harder to get

Land problems in the '60s are likely to be worse than in the '50s.

Some builders will be priced out by the soaring cost of land in desirable areas. In the '50s you've already seen land costs shoot up from \$1,500 to as much as \$6,000 an acre.

Some builders will be zoned out by towns that fear the heavy load on municipal services and the sharp tax rise imposed by hundreds of new homes. You've already seen one-acre—and even two-acre—zoning in some suburbs.

Take the need for schools: By 1962 there will be 34.5

million children in elementary school—4.5 million more than in 1957. By 1965 there will be 14 million high school children—4 million more than in 1957. To cope with its bursting schools, one state—California—will need 12 new classrooms every day for the next decade.

Some builders will be shut out by the high cost of developing lower-cost raw land and providing all the facilities that must be included in today's new communities. Yet it is on this raw land that much of the housing of the '60s must be built.

But the biggest problem of all could be inflation

"The most important economic problem to be faced by the US during the next 20 years is how to prevent price inflation while maintaining full employment and full production in a free economy," says Neil Jacoby of the University of California.

That is also the concensus of many leading economists and public officials today. What does it mean to the housing industry?

Runaway inflation (in wage rates and materials prices) could push the price of new houses out of the reach of

families who want to buy them.

Runaway inflation could make the problem of finding mortgage money even more difficult, if not impossible.

Runaway inflation could push the price of raw land out of sight.

Runaway inflation could hike the cost of new schools and other community facilities so high that communities would close their doors to new building.

Runaway inflation, in short, could cancel out all of the trends that are now working for the housing industry.

What can you do now to get ready for the coming boom?

In the 1960s high building costs will continue to be the key problem facing the housing industry. High costs aggravate every other problem.

So one of the first things to do right now is to spur industry-wide research efforts (like the two NAHB research houses described on the next 18 pages). This is the way to find better and cheaper construction methods, this is the way to perfect a technology based on components and more efficient in-plant labor, this is the way to lick the high cost problem.

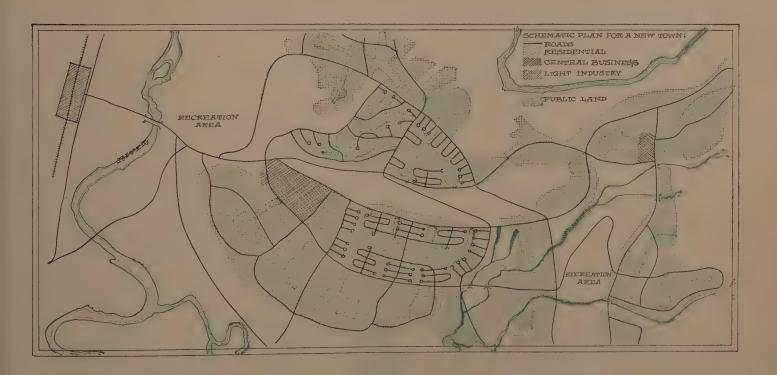
But new ideas and techniques are effective only when they are used. Keeping up to date on research—and applying what you learn—will prove to your competitive advantage today and tomorrow. (Next month, H&H will show you how two Ohio builders slashed costs by learning new techniques from Bob Schmitt, new chairman of NAHB's Research Institute.)

In the 1960s it will be worth more than ever to close the gap in design between the best houses and the average house. Consumers will not trade-up unless offered a house that is better looking and more livable, and the housing industry can not realize its full sales potention unless it uses the full potential of architect-builder collaboration. (Next month, H&H will start a new series on "What an architect can do for the builder's house".)

In the 1960s, the community will be the focus of planning. Not so long ago, most thinking was limited to the house itself. Later we started thinking about integration of houses into pleasant, well-planned neighborhoods. Now we have begun to think of houses as part of a community with schools and other costly facilities that somebody must pay for.

Everybody in the housing industry has a vital stake in finding new ways to use land that will enable us to have the new housing, new schools, and new facilities we need without intolerable tax burdens. (H&H will devote its entire August issue to land planning and land use.)

Everybody in the housing industry now has a stake in community planning because the day is past when an industry can live apart from the world it helps to create.



END

No matter how you build today-

You can learn a lot about building better for less from

1959's Two Research Houses

The single most impressive fact about the two NAHB research houses shown opposite is that they are research houses. They are evidence of a ground swell of real and practical research in the housing industry.

This kind of research is important to you whether you are an architect or a builder—in fact no matter what your stake is in the future of the housing industry.

This kind of research is important to you because all the plans, all the technical papers, and all the laboratory tests do not mean much until they are translated into reality. Complete houses must be built to prove the real worth of almost any new technique in homebuilding.

This kind of research is important to you because it is a direct attack on the housing industry's No. 1 problem: high costs. Only by efforts like this will the industry learn how to build quality houses for less money. Only by efforts like this will the value of component building be dramatized. Only by efforts like this will the extensive research efforts by manufacturers to provide better new products for housing be tested and dramatized.

Not all of the new ideas and new techniques and new products in these research houses will prove to be perfect. That is why the research houses are not meant to be taken as total ideas, but rather as laboratories that demonstrate how dozens of different ideas might work together.

Both of these houses are worth careful study because they represent the best thinking of a great many experts

The Knoxville house is co-sponsored by NAHB's Research Institute and the Masonite Corp. Martin Bartling, NAHB's second vice president, built it, and Bruce McCarty, AIA, was consulting architect.

The South Bend house was built entirely under the auspices of the Research Institute. Andy Place, last year's chairman of the board of the Research Institute, built it; and Herman York, AIA, was consulting architect.

Both of these houses are advanced houses which NAHB has set on a pedestal for all to see. Both are full of ideas ready to be copied or adapted. Both are invitations to re-examine your own ideas about the best ways to build better for less.



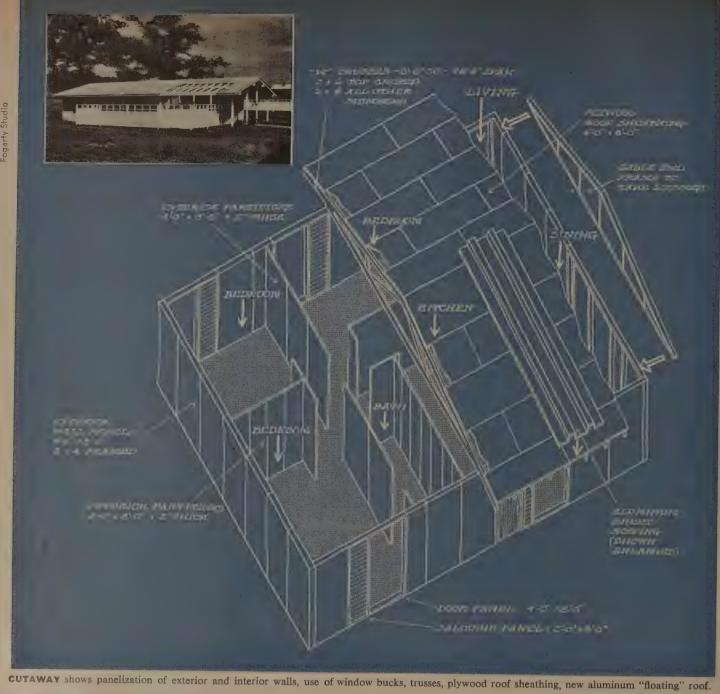
This is the Knoxville Research House

It adds new techniques to today's building methods	ee	p	116
It dramatizes a new way to make your own panels		p	117
It promotes a simple and logical erection method		p	118
It tests the case for plastic plumbing		p	120
It explores the possibility of a new wiring method		p	122
And it dramatizes many important new products		p	123



This is the South Bend Research House

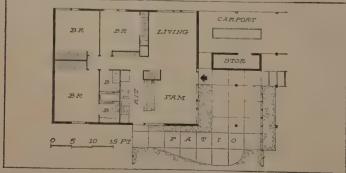
It promotes the use of factory-made components	.see p	1:	24
It features a new light, strong, complete exterior panel	p. P	1	25
It introduces a revolutionary new roof system	. P	1	26
It shows the advantages of pre-finished interior partitions	p	1	28
And it dramatizes many other important new products	p	1.	30



In its Knoxville Research House NAHB adds new techniques to today's building methods

You will find new ideas everywhere in this house-from slab to roof top. Specifically, you will see:

1. A good wall panel (opposite). This panel, designed by Masonite, fits the standard 4' module agreed to by the industry at the H&H Round Table on standardization (H&H,



PLAN shows simple three-bedroom, two-bath layout. All plumbing is concentrated along one wall (p 121 for details). The 1,050 sq ft house was designed to sell for \$13,000 with all extras.

July '55. See also Sept '58, p 100). It can be built by a carpenter and costs only 65¢ a sq ft (vs 85¢ for a conventional wall).

2. A panel-making jig (opposite). This jig, also worked out by Masonite, speeds panel making, helps insure the dimensional accuracy required in component building. Using jig, two men with hand tools built three panels per hour.

3. A good, and economical, slab (p 118).

4. An important new roofing method (p 119).

5. A simple, logical erection technique for all of the components used in the house (p 118).

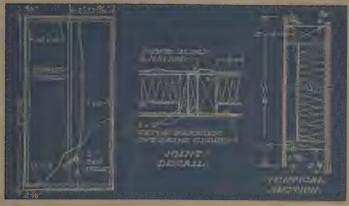
The house also includes two experiments that strike at two of homebuilding's biggest cost problems:

1. A plumbing system (p 120) made of plastic pipe assemblies. Joints in the waste lines are made with solvent welds-without threading or heating. (For more on plastic piping, see also Round Table, p 132.)

2. A new electrical system (p 122) 80% prefabricated off the site. It includes a prefabricated wiring "tree", prewired panels, and a remote low-voltage switching system.

Plans for this house are available from NAHB Research Institute, Washington 25, DC for \$15.

Here are new techniques to make your own wall panels



Detail of typical panel shows position of framing members, how panel skins extend beyond framing members to fit over spline between panels and 2x4 sill.



Jig table speeds accurate assembly of panel. Table can be built of 2x8s for \$40 to \$50. Blocks position framing members, metal brackets serve as stops for placing skins.



First step is to place and nail together 2x4 and 1x4 framing. Panel is exactly 8' high, fits a precise 4' module. Both 4' and 2' wide panels are used.



Second step is the fastening of sheathing-siding, a hardboard with a board-and-batten surface called (by maker, Masonite) Sunline Siding. Surface can be shop primed for 2ϕ a sq ft.



Third step is to turn panel over, install insulation and drill holes in top member for pre-wiring. Aluminum foil on inner surface of insulation batt greatly increases U factor.



Final step is to glue prefinished interior skin to panel framing. Base outlet box picks up Romex cable in panel and special beveling tool puts miter on panel skin edge for V-joints.

This panel and jig should sell many more builders on panelization

Why? There are two good reasons:

1) The panel is a good panel. It is complete: it includes exterior skin (siding and sheathing), insulation, vapor barrier, and interior skin (which could be any of several prefinished materials).

2) The jig allows any carpenter to build this panel to tight, component-house tolerances.

So NAHB and Masonite's sponsorship of the panel opens

up the possibility of component building to many more builders—even small ones.

There is an obvious cost saving in material, fabrication, and erection costs mounting to at least 20ϕ a sq ft—or \$200 on a 40'x30' house. And costs could be cut even more by mechanizing the nailing operations. Masonite purposely hand-nailed exterior skins to the framing, but points out that nailing time could be cut in half by power nailing.

Here are new techniques to use in component building

The first thing that saves money in this house is the simplicity of the foundation (see below). The 8"x16" grade beam cost only \$1 a ft. Formwork for the slab was eliminated, by using 4"x8"x16" edge blocks. Slab itself is lightweight concrete. Estimated total saving: \$75.

The second thing that saves money is the simplicity of

The second thing that saves money is the simplicity of erection of the wall panels and panel-size window bucks and door openings (see below). The panels are easy to handle,

easy to fasten to each other and to the slab.

The third thing that saves money is the simple progression of the roof assembly (see opposite). Placement and fastening of trusses is speeded by brackets on the top plate. And the sheathing and aluminum skin go on fast because they are in component-size sections.

Proof of the pudding: exterior wall panels and the roof went up in a day.

1. Insulating slab is built a new way



Slab edge blocks eliminating formwork are laid in mortar over grade beam. Cost of beam and blocks: \$1.50 a ft.



Ready for pour, a subgrade of gravel is placed and sprayed for termites. Small pipe is for future termite treatment.



Insulating foam concrete has smooth consistency. Called Betocel (p 123) the mixture is sand, cement, water and a

bubble-forming emulsion. Density can be varied from 20-75 lbs per cf. Slab has K factor of .235.

2. Wall panels drop into place, are easy to fasten



Starting at a corner, wall panels are tilted up, nailed through exterior and interior faces to 2x4 sill plate.



Fixed sash buck (Fabrow) is 8' panel of rabbeted 2x6 stock, joined at corner to wall panel with corner post.



Wall panel edges are toenailed to sill before next panel is placed. Sash bucks are nailed to joint spline and panel.

3. Roof system goes up fast because it is a simple assembly of big parts



Brackets that position trusses are placed 2 ft oc on top plate, a continuous 2x4 that ties together wall panels.



Trusses, W-type with big 2x6 top chord, are positioned by hand. Truss connector is H-Brace nailed from one side.



Top chords of trusses are nailed to bracket, tying roof firmly to wall system. 2x6 tail forms 3' overhang.



Plywood roof-sheathing, in 4x8 panels, closes in house fast. At this point, lightweight interior partitions go in.



Roofing, just like that used in South Bend house (p 127), goes up next. Roofing felt is used over plywood.



Edge of trellis opening in roof is caulked and weatherstripped before batten-seam sheet roofing is placed.



Aluminum sheet roofing goes up in 4' wide sheets, is hand riveted to batten bars set in clips nailed to plywood.



Ventilating gable goes up in three big louvered sections that leave whole gable open to cool attic.



Finished house uses heat-reflecting aluminum roof and light-color exterior paint. Paint is 20-year finish (p 123).

This house should give a big boost to component building NOW

The simple logical progression of steps used to build the Knoxville house is an excellent basic primer in how to build better for less.

Because of the publicity given the house in magazines and at the NAHB show later this month, thousands of builders will have a chance to compare this method of building with their present methods and to see how to use it to cut costs.

The component system used not only reduces labor time, it reduces the level of labor skill needed because, with care-

fully engineered components, a minimum of on-site fitting and finishing is required. And it tends to eliminate weather problems because it closes in the house much faster than even other truss-roof construction.

Several builders have already expressed interest in the house. NAHB President Nels Severin has said he plans to build "a Knoxville house" in San Diego. And Prefab Dealer Marley Williams has asked his home manufacturer (W. G. Best) to package the house for him.



SOLVENT welding of polyvinyl chloride waste and vent lines takes only one-fourth the time needed to make bell and spigot joint.

Here are new techniques to cut your plumbing costs

In the Knoxville house you can see three ideas intended to help you cut the high cost of plumbing:

1. Plastic piping. Plastic can reduce piping costs a third, says Carl Boester, co-designer (with NAHB) of the plumbing system (see diagram opposite). Some of the reasons: In many commonly used sizes, plastic costs less than metal. Fewer joints are required because plastic pipe comes in long lengths or rolls. Waste and vent conections can be made much faster (see photo above).

However, this technique must still be termed experimental, primarily because of code acceptance. (See box opposite, and

Round Table, page 136 for details.)

- 2. Sewage grinding. The waste system is Sanitoi System-B (see H&H, June '58, p 184 for details). By cutting the amount of water required for flushing, this system makes possible much smaller (and cheaper) waste lines and a much smaller (and cheaper) tile field or seepage bed (see below).
- 3. Surface-mounted plumbing wall. The photo, opposite, lower right, shows how the usual double plumbing wall was eliminated by surface mounting plumbing below counter-top height, so kitchen equipment covers it.

Here are the key elements of the sewage disposal system



Electric grinder is fastened to bowl flange, placed in box set in slab. With grinder, only 1 gal (vs 6) is needed for flushing, so 2" waste lines are adequate.



Tank for sewage has settling and aerating compartments. Sewage is aerated by 100-watt compressor (for aerobic bacteria digestion system).



Seepage bed is width of 'dozer blade, 40" deep, filled with crushed rock. Plastic effluent line is perforated. Ground here is nearly solid clay.

Here is how the plastic piping is installed



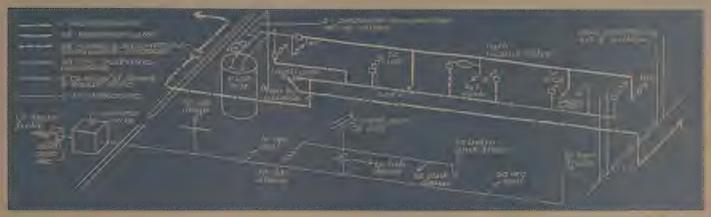
Before slab is poured, 2" polyvinyl chloride waste lines are placed. Lightweight pipe can easily be handled in large prefabricated assemblies.



Boxes for sewage grinders are set and leveled, connections made to waste lines. PVC pipe can also be threaded in field to connect with metal fittings.



Readying connection for sewage grinder is final step before trench is backfilled, slab is poured. Top of box will be flush with floor.



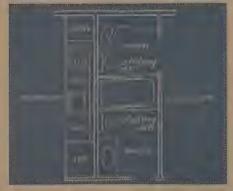
Water and drainage system includes six different types of plastic pipe. The newest is the 3/4" polypropylene hot-water pipe. While this plastic seems suitable

for hot-water service, it is still in the experimental stage. The manufacturer, Carlon, is also evaluating other materials that should withstand 180° temperature

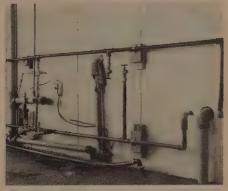
and house pressures for years without failing. Cold-water system uses two proven and commercially available types of plastic, ANBS and PVC.



Rough plumbing, ready for placement of slab, was planned all-in-line to minimize pipe runs. Middle box of three is for bathtub trap.



Plan shows how kitchen backs up on the two bathrooms in the house, so all plumbing can be concentrated on one wall. Hot water heater is under counter in kitchen.



Plumbing "wall", here seen from the kitchen side, is made up of 2" thick panels. Kitchen equipment will cover surface-mounted lines exposed here.

This plumbing installation could open the door to plastics

With plastic plumbing, every connection in a house might be made in 10 minutes by a trained plumber.

More than a few builders know this, and many would like to use a plumbing system like the one in this house. Most of them can't because: 1) code acceptance has lagged, and 2) plastic pipe for hot-water systems is still controversial.

NAHB's experiment could speed up progress on both counts.

Acceptance of plastic pipe for cold-water systems is

spreading fast. And plastic (mostly polyvinyl chloride) drainage systems should soon be approved for housing. But many plastics experts are not yet convinced that they have found the right plastic for hot-water systems. The polypropylene used in this system seems to be good, but it is not proven. This experiment will probably accelerate research efforts by all plastics producers. Likely possibility: more houses with plastic cold- and waste-water lines, metal hot-water lines.



WIRING "TREE" includes, from left, appliance outlets, service entrance panel, remote control relays, branch circuit feeder boxes.

Here are new techniques to cut your wiring costs

The wiring system used in this house was 80% completed off the site.

Two new major components—a prefabricated wiring "tree" (above) and prewired panels (below right) make this possible. The wiring tree includes the entrance panel, appliance outlets, and branch-circuit feeder boxes. Wall panels include an outlet box with Romex cable leading out the top. The only on-site work is connecting the panels to the feeder boxes, the service entrance cable to the meter box.

The panels were wired for remote-control low-voltage switching. Remote control relays were placed in the branch-circuit feeder boxes, connected to the switches with bell wire. This system was estimated to be cheaper than the cost of additional Romex cable that would have been needed to get the same degree of switching flexibility. For lower-cost, simpler installations, Romex switch legs in panels could be used.

The system was developed by GE's Wiring Device Dept and NAHB.



Electrical center of house is wiring tree, simply nailed in place in kitchen. At lower right are relay gang boxes and branch circuit feeder boxes.



Branch circuit feeder boxes with relay gangs are passed up for installation above ceiling. Connections from boxes to prewired panels are above ceiling.



Pre-wired panels, here ready for erection, all have three ft length of Romex cable coiled at top. Cable leads to base receptacle in panel.

"Prefabricated" wiring may revolutionize wiring costs

The most important thing about this experiment is that it is a direct attack on one of homebuilding's highest costs.

The wiring tree idea has exciting possibilities. Simply by substituting relatively efficient and lower-cost in-plant assembly for on-site assembly of the entrance panel and feeder boxes, costs are cut sharply. Other industries (aircraft, for example) have long used these wiring harnesses.

On the matter of pre-wiring panels, there is disagreement among experts. Some argue that pre-wiring of panels (as in this house) is the cheapest method of distributing power to outlets in rooms. Others argue that surface-mounted baseboard wiring (as in the South Bend house, see p 129) is the cheapest. In either case, use of three-wire systems and pressure-lock connectors might cut costs still further.

Here are the new products featured in Knoxville

ALLIANCE WARE, INC. Two-sided bathtub serves both bathrooms. With an apron on both sides, this tub joins separate toilet and lavatory compartments, is key to Privazone system. Made of pressed steel, the tub can have two different colored aprons to match different color schemes in each bath. For full data, circle No. R1 on coupon on p 236.

ALUMINUM CO. OF AMERICA. Aluminum sheet roofing, ridge, and fascia. See page 119. For full data, circle No. R2 on coupon on p 236.

AMERICAN BILTRITE RUBBER CO. New vinyl floor tile. Called Care-Free. See New Products review on page 167. For full data, circle No. R3 on coupon on p 236.

CARLON PRODUCTS CORP. Plastic plumbing pipe. See page 120. For full data, circle No. R4 on coupon on p 236.

DOW CHEMICAL CO. "Saraloy" plastic flashing is a vinyl sheet used with an adhesive. See page 127. For full data, circle No. R5 on coupon on p 236.

DU PONT. New long-life two-coat exterior paint which NAHB Research Institute believes may have a 20-year life. For full data, circle No. R6 on coupon on p 236

EASY LAUNDRY APPLIANCES. Combination washer-dryer in a single, undercounter appliance. For full data, see New Products review on p 155. For full data, circle No. R7 on coupon on p 236.

FRIGIDAIRE. New model dishwasher, refrigerator, garbage grinder, counter top burner unit, and built in oven. Also the air conditioning system. Complete line detailed in New Products, H&H, Dec '58. For full data, circle No. R8 on coupon on p 236.

HIGGINS INDUSTRIES, INC. Hardwood tile flooring 1/8" thick. See page 130 for details on this product.

MASONITE CORP. Jig for making wall panels shown on page 117, page 117. "Marlite" bath wall covering. New kitchen cabinet concept using Masonite. For full data, circle No. R9 on coupon on p 236.

MASONITE CORP. Jig or making wall panels shown on page 117. For plans, circle No. R90 on coupon on p 236.

MINNESOTA MINING AND MFG CO. New floor covering adhesive. For full data, circle No. R10 on coupon on p 236.

OWENS-CORNING FIBERGLAS CORP. New combination acoustical tile for kitchen ceiling combined with ceiling insulaton and self-supporting with a hidden-hanger system. For full data, circle No. R11 on coupon p 236.

REFLECTAL CORP. subsidiary of Borg-Warner. Betocel foamed light-weight insulating concrete floor slab. See page 118. For full data, circle No. R12 on coupon on p 236.

ROHM & HAAS CO. New acrylic pass-through doors. For full data, circle No. R13 on coupon on p 236.

TIMBER ENGINEERING CO. Dual-clip framing anchors and Teco rafter fasteners. For full data, circle No. R14 on coupon on p 236.

TUBE TURNS PLASTICS, INC. New PVC plastic pipe fittings, primarily for solvent welding. For full data, circle No. R15 on coupon on p 236.

U S GYPSUM CO. Expanded metal fencing, made like metal lath. For full data, circle No. R16*on coupon on p 236.



KITCHEN shows products by Easy Laundry, Frigidaire, American Biltrite, Owens-Corning, Masonite, Elkay, Formica, Moen, Nutone and Mission Appliance.

These products were also used

ADAMS ENGINEERING CO. Jalousie doors and windows with redwood casings, set in FABROW bucks. For full data, circle No. R17 on coupon on p 236.

CEILHEAT, INC. Electric resistance hot coil frame set in duct to provide warm air heat with a/c fan. For full data, circle No. R18 on coupon on p 236.

CONSOLIDATED GENERAL PRODUCTS. "Veni-Flex" closet doors. For full data, circle No. R19 on coupon on p 236.

CRANE CO. Round lavatory set into counter top. For full data, circle No. R20 on coupon on p 236.

ELKAY MFG CO. Stainless steel kitchen sink. For full data, circle No. R21 on coupon on p 236.

FABROW MFG CO. Structural door and window panels. For full data, circle No. R22 on coupon on p 236.

FORMICA CORP. Counter tops. For full data, circle No R23, on coupon on p 236.

GENERAL ELECTRIC CO. Wiring devices and hardware for experimental wiring tree. For full data, circle No. R24 on coupon on p 236.

H-BRACE INC Roof trusses are made with H-Brace metal connectors and clip anchors. For full data, circle No. R25 on coupon on p 236.

INDEPENDENT NAIL AND PACKING CO. Various types of screw-threaded nails. For full data, circle No. R26 on coupon on p 236.

McKINNEY MFG CO. Self-mortising hinges cut door hanging time. For full data, circle No. R27 on coupon on p 236.

MISSION APPLIANCE CORP. Hot water heater. For full data, circle No. R28 on coupon on p 236.

MOEN FAUCET CO. Faucets. For full data, circle No. R29 on coupon on p 236.

MOHAWK FLUSH DOORS CO. Factory-built interior Masonite panels and doors. For full data, circle No R30 on coupon on p 236.

NUTONE, INC. Vent fans, chimes, kitchen center for mixing, blending, etc. For full data, circle No. R31 on coupon on p 236.

ORKIN EXTERMINATING CO, INC. Termite treatment given to subgrade. For full data, circle No. R32 on coupon on p 236.

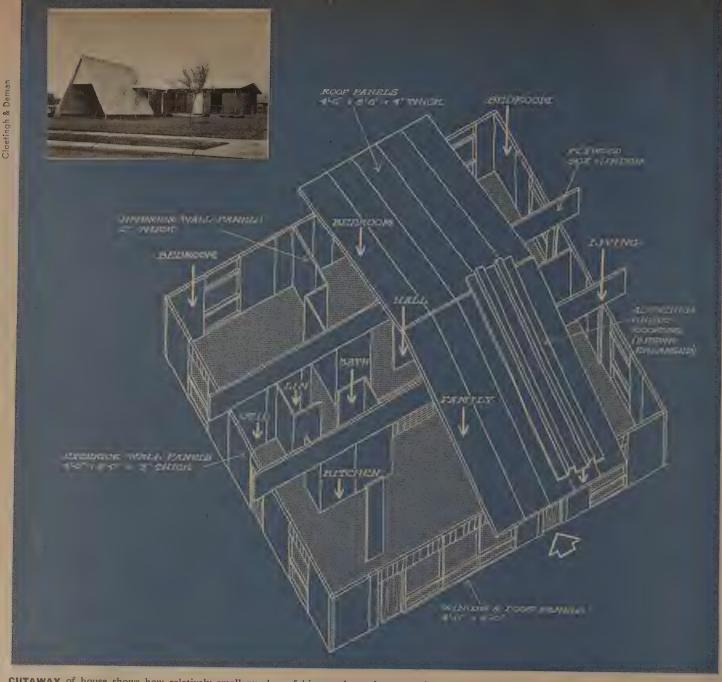
SANITOI, INC. Water-saving closet and sewage disposal system. Detailed on page 120. For full data, circle No. R33 on coupon on p 236.

US PLYWOOD CORP, Roof sheathing. For full data, circle No. R34 on coupon on p 236.

VISKING CO. Polyethylene vapor barrier. For full data, circle No. R35 on coupon on p 236.

WASCO PRODUCTS, INC. Laminated acrylic shower doors and decorative sliding doors. For full data, circle No. R36 on coupon on p 236.

YALE & TOWNE MFG CO. Exterior door locksets and bath accessories. For full data, circle No. R37 on coupon on p 236.



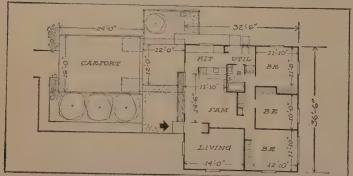
CUTAWAY of house shows how relatively small number of big panels work as complete structure, shell, and finish of house.

In its South Bend Research House NAHB goes all out for factory-made components

From sill plate to ridge cap this research house was made in the factory.

It was not built, it was assembled at the site from a series of prefabricated components.

Basic element of the house is a sandwich panel (Koppers)



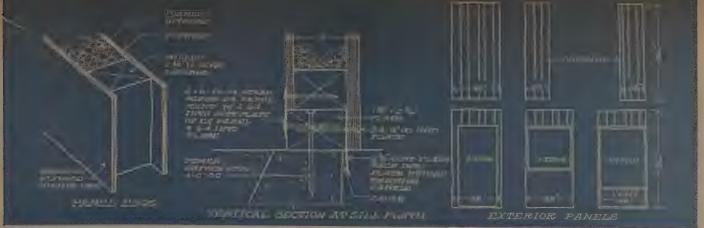
PLAN shows how house was designed on 4' module. For example, 36'6" outside dimension (right) is made up of nine 4' panels and corner posts.

made of plywood and foamed styrene. This panel is used for exterior walls, is a major element of the roof, and is used for interior partitions. The logic of the panel is simple: A single unit made of just two materials, it replaces the usual seven or more separate, hand-fitted layers of a conventional wall or the seven layers of a conventional roof.

Because the panels are used for exterior walls and roof and interior partitions, this house could not have been built if it had not been carefully designed to fit a standard module. It is built to the basic 4' module (see H&H, Sept '58), though some half-module (2') and quarter-module (1') panels are used.

Careful design assured that the precisely-made panels would fit precisely. (It is easy to cover a ½" gap left in conventional construction, but there is no good way to hide gaps caused by inexact dimensioning when you use panels.)

Even in this first experiment, the advantages of this kind of component building are obvious; the house was closed in (wall panels up and roof assembled) in only 35 manhours. And not only does this type of house reduce the labor *time* needed, it reduces the level of labor *skill* required.



FACTORY-MADE PANEL has core of expanded polystyrene glued to plywood faces. Panel must be factory-made because it must be made

in a huge press and high-pressure steam is required to foam plastic All exterior wall panels were 3" thick, 8' high, 4' or 2' wide.

Factory-made exterior panels are light, strong, complete

Each exterior wall panel weighs less than 100 lbs, can easily be set in place by two men. Yet, in tests at Rensselaer Polytechnic Institute, they withstood loads in excess of 4,000 lbs

per lineal ft (well in excess of FHA's MPS requirements for a stud wall).

Projected cost of these panels: 60¢ a sq ft.







Erection starts with exterior wall panels and temporary bracing. Outside face of panel is nailed through to sill plate. Inside face is fastened down with sheet-metal anchors (see detail above).

Nailed spline joint between panels is caulked. Sashless window (Pierson) is used for window panels. Window jambs are structural members running full height of panel.



Window and door panels fit precisely with solid panels on 4' module. Battens are glued and nailed over panel joints.

Foam in panel provides moisture barrier, gives walls a U

factor of 0.09. Total heat loss through walls and roof is a low 54,000 btu. Slab is insulating concrete (see p 130), made like all of Place's new slabs (see H&H, June '58).

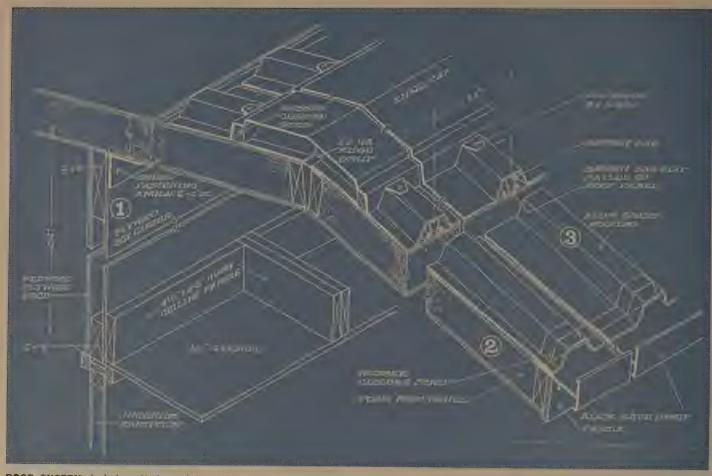
NAHB's use of the factory-made components is big news

It is big news because it promotes the idea that one of the best ways to fight high costs is to build as much as possible of the house in a factory, as little as possible at the site

It is big news because it promotes the idea that another of the best ways to fight high costs is to build with the biggest pieces that can conveniently be handled.

These panels were made in Kopper's pilot plant, but

chances are good that they will be available soon. FHA has OK'd them for roof and partition use, and acceptance for exterior-wall, load-bearing use is pending. (Other similar panels may soon be on the market: National Homes has been experimenting with several metal-faced panels; see H&H Dec '57. And a major manufacturer hopes to announce shortly a new factory-made load-bearing panel for roofs and walls; see H&H next month.)



ROOF SYSTEM includes: 1) box girders, 2) roof panels, 3) "floating" aluminum skin attached to batten bars.

Factory-made roof sections offer revolutionary new roof

This roof system is probably one of the simplest ever devised. It uses only three basic components (see drawing above). These components are all prefabricated and highly engineered, assemble quickly and easily, and provide structure, interior ceiling, insulation, vapor barrier, and exterior skin.

Two plywood box girders (1 on drawing above) are the main roof support. The 18' panels (2) are also structural

—and they form a cathedral ceiling inside. The aluminum sheet roofing (3)—also used in Knoxville—makes a permanent, heat-reflecting outer skin that goes on fast, actually "floats" on the roof panels. Aluminum needs room to expand, so roofing is fastened to batten bars which can move on the series of clips which hold them to the roof panels.

Panels were used to make unusual carport (see page 115).



Panelized girder sections are light enough to be manhandled into position. Male end (above) joins female end of next section to make joint over bearing partition.



Roof panels, all 4'x18' and 4" thick, weigh only 190 lbs. Inner ends of panels cantilever past girder to ridge line, reduce bending stress in main span of panel.



Nailed spline connects adjacent panels. All splines must be milled to exact size to avoid a too-loose or too-tight fit (dimension lumber can vary + or $-\frac{1}{8}$ ").



Batten bars (aluminum) to which roofing sheets will be fastened are wedged into clips, right, which are nailed 18" oc to roof panels.



Aluminum roofing goes on in 4' wide sheets, 18' long. Roofing is .019" thick, now costs less than 20ϕ a sq ft installed, might cost only 13ϕ with volume, maker (Alcoa) says.



Hand riveting tool makes a watertight connection of sheet roofing to batten bar in one motion. Roofing and batten bar expand and contract together, moving in clips shown at top.



Plastic flashing, a vinyl sheet made by Dow Chemical, is applied in minutes. Roof and vent are coated with adhesive; hole is cut in vinyl and it is pulled over stack, smoothed in place.



Ridge cap closes over weatherstripping (black line above) and caulking. This roofing must be pre-engineered because cutting and fitting in the field is costly.

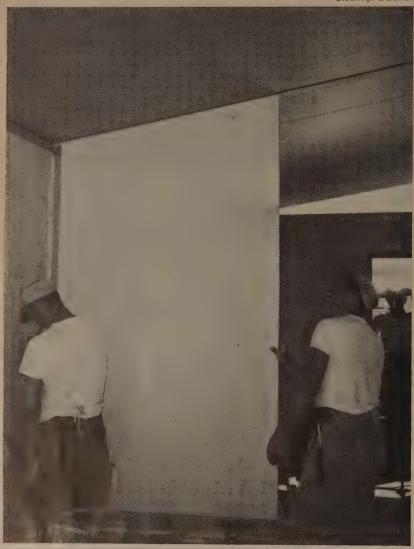
This new roof system may be a big cost-cutter

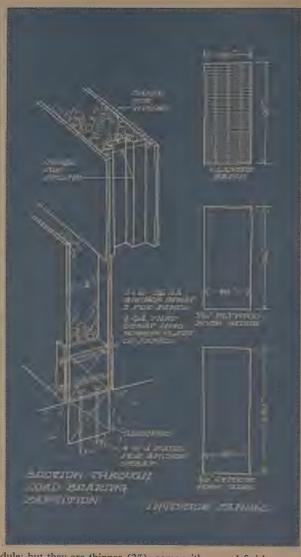
Because it is assembled, simply and logically, from a small number of big parts, it offers the possibility of great savings in erection time.

These savings are not dependent on using the whole system. You can get part of the saving by using any one of the three basic elements. The aluminum roofing can prove its worth on any type of production house (as in the Knoxville house). The roof panels can let you realize the

theoretical savings of a cathedral ceiling and roof; they provide strength, finish, insulation and low cost all in one. And the two big box girders have three distinct advantages over a single large ridge beam or girder: individually, they are lighter and easier to handle; they rest on the top framing member of the walls so there is no load on the gable; and, because spans are smaller when you use two girders, rather than one, roof framing can be lighter.

Cloetingh & Deman





INTERIOR PARTITIONS have same basic structure as exterior panels, fit same 4' module; but they are thinner (2"), come with several finishes.

Factory-made interior partitions cut finishing costs



Pre-finishes provide variety, cut finishing time

Simulated masonry is actually brick dust imbedded in a layer of mortar keyed to expanded polystyrene by grooves cut in core of the panel. Scoring brings out pointing. Complete panel is called Pan-L-Brik (American Cement Products). Plywood panel is prefinished. Skin of box girder at ceiling is wire-brush etched plywood.

The big modular interior partitions in the South Bend house went up quickly and easily (see above), and required a minimum of finishing and joint treatment.

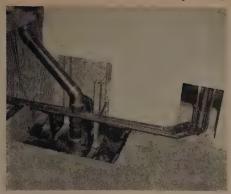
The partitions require a minimum of finishing because:

1) the drywall or plywood faces are glued to the panel cores, so there are no nail heads to cement, 2) plywood faces are pre-finished in the plant, 3) "brick" faces—like the one in photo at left—are made as an integral part of the panel (see description below, left).

The partitions require a minimum of joint treatment because only the drywall faced panels need to be taped and cemented, the others are left with a barely visible exposed joint. By the same token, only the drywall panels require painting (although a new vinyl wall covering by Dow was applied to the panels of some rooms as a test).

As shown in drawing above, partitions are fastened at the bottom with sheet-metal anchors nailed to screeds set in the slab. They are fastened at the top to a nailer which in turn is fastened to a ceiling panel.

The 2" thickness of the panels dictated a surface-mounting approach to wiring, plumbing, and accessories. For example, the wall-hung toilets (opposite) were "hung" from steel Ts imbedded in the slab; since normal X-brace hangers could clearly not be mounted in the panel. Doors (opposite) were surface-mounted, extend full height to the ceiling to avoid framing over the door. Cabinets and outlet wiring were also surface-mounted. (The leads to the baseboard were run in panel-edge chases, shown in drawing above.)







Wall-hung toilet gets strong support from the slab, not from the panel

The problem of hanging the toilet was solved by welding metal channel into two big Ts and imbedding the tops (upside down) in the slab. This system is just as strong as the standard hangers for wall-hung toilets, which require a frame wall construction much

thicker than the thin sandwich panels used for interior walls in this house. Bolts to hold the bowl were fastened through panel to upright legs of Ts in scored-out section at bottom of panel. Exposed vent stack is angled into next room, covered by wall cabinet there.









Surface-mounted doors eliminate cutting and fitting

All of the door openings are formed by simply leaving out a panel. The doors do not fit into the opening, they cover it. Thus, the opening (left photo) does not have to be exactly square. The 8' high doors eliminate need for a panel section above the door head. Weatherstrip (center photo) helps sound-proof the door. Center and right photos show hardware (Stanley). "Refrigeratortype" latches require no knobs, need just a touch to open or close. Thumb latch in strike plate locks door.

H&H Staff





Surface mounted cabinets and wiring cut installed cost

Medicine cabinet above is screwed to plywood panel skin. Use of sandwich panels also forced wiring out of walls-and so made installation easier. The edges of the partitions have a chase

behind the spline, for wiring drops to switch boxes at panel edges and baseboard outlet strip (photo above) fastened to bottom edge of panels.

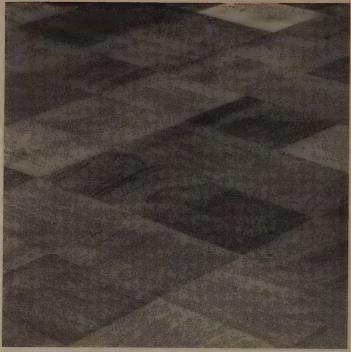
The partitions emphasize two important lessons

The first lesson is in the economics of pre-finishing. When pre-finished partitions are set in place, the job is complete. There is no need for fussy, time-consuming on-site finishing (in the shop, panels can be spray- or flow-coated at a fraction of the cost of on-site work.)

The second lesson is in the economics of surface mounting. The 2" thickness of the partitions forced surface mounting in this house, but the advantages are apparent even if you use conventional frame construction. For example, when you use a surface-mounted ceiling height door, there is no need to frame in a piece of wall over the door with cripples and doubled-up studs. A door can be mounted to close against an opening in any kind of wall. And using the slab to "hang" a wall-hung toilet can cut the added expense of bigger framing members which you need in most wall-hung plumbing partitions. The vent stack can be covered with a cabinet.

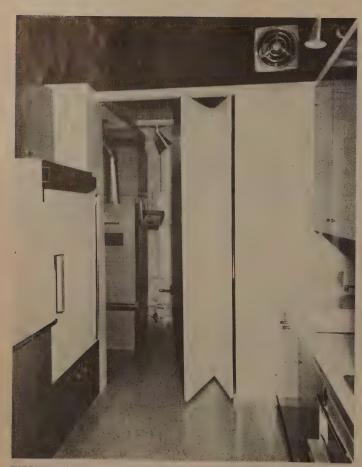


HIGGINS HARDWOOD FLOOR TILES used in both the South Bend (photos above) and the Knoxville Research Houses, are 9" square and 1's" thick. They are solid (not laminated) pieces made from an African hardwood. (The wood comes from trees which grow 120' tall without branches, so knotholes are not a problem.) The wood is literally stretched (during the process it grows more than 1" in 10") and dried so that it is permanently larger across the grain than in its natural state.



Thus, maker says, it can absorb moisture without changing size. A baked-on finish resists greases, water, most solvents, fruit juices, etc. The product may be applied by adhesives direct to slab or wood subflooring, with conventional tools. Price: competitive with the lower priced resilient floorings. Next month House & Home will report at length on this Higgins Industries product. For details, circle No. 38 on coupon on p 236.

Here are the new products featured in the South Bend



KITCHEN shows products by Fiberesin, Whirlpool, Chrysler Airtemp, American Biltrite, and US Plywood.

ALCOA. Aluminum sheet roofing, ridge and fascia. See story, page 126. For full data, circle No. R40 on coupon on p 236.

AMERICAN BILTRITE RUBBER CO. Amtico Care-Free Tile. See New Products review, p 167. For full data, circle No. R41 on coupon on p 236.

AMERICAN CEMENT PRODUCTS. Pan-L-Brick accent panels prefabricated at the factory is compounded crushed brick and Portland cement. For full data, circle No. R42 on coupon on p 236.

CHRYSLER AIRTEMP. Full air conditioning system combines an 80,000 Btuh output, gas fired counterflow furnace, 2-hp air cooler, and electrostatic filter. Filter system also includes activated charcoal filters and sterilizing lamp. For full data, circle No. R43 on coupon on p 236.

COLUMBUS COATED FABRICS. A wall covering made of sheet vinyl, with a slight embossing to give a feeling of depth. Several colors are available. The fabric is applied conventionally. For full data, circle No. R44 on coupon on p 236.

DOW CHEMICAL. A filament yarn still being developed by Dow as a textured wall fabric is used as the wall covering in the kitchen, bath and one bedroom of the South Bend Research House. The material, Fiber 957, was applied conventionally, first at the ceiling, then along the edges and butted before being brushed out. Not yet available commercially.

FIBERESIN PLASTICS CO. Solid panels for cabinets and counters in kitchen and dining area are molded of wood fibers and thermosetting plastic resins. Three colors used are light beige cherry, toast elm and white. For full data, circle No. R45 on coupon on p 236.

GUSTIN-BACON MFG CO. Prefabricated ducts are made of 34" to 1" fiberglass insulation encased in plastic vapor barrier, has built-in heat, sound, and vapor insulation. Available in 4", 5", 6", 7", 8", 9", 10", 12", 14" ID sizes in 6' lengths. For full data, circle No. R46 on coupon on p 236.



NATIONAL FIBERGLAS plastic lavatory has bowl and counter top in one piece. Fixtures are not included, but overflow is built in. Drain is pre-drilled, but faucet holes are drilled by plumber as desired, with a standard wood bit. Material is Owens-Corning Fiberglas polyester resin. Size is 36" long and 21" deep, with the 4" splash at either or both ends. Eleven pastel colors are available. For full data, circle No. R39 on coupon on p 236.

Research House

KOPPERS CO. Exterior walls, interior partitions and roof of carport and breezeway are factory-made panels of foamed styrene and plywood faces. See story, page 125. For full data, circle No. R47 on coupon on n 236

LUXOR CARPET CO. Foam backed carpet. See New Products review, H&H, Dec '58, p 145. For full data, circle No. R48 on coupon on p 236.

MASONITE CORP. A misty walnut hardboard, tempered and primed, is available in grooved patterns or plain. It is used on interior doors in the South Bend Research House. For full data, circle No. 49 on coupon on p 236.

MINNEAPOLIS-HONEYWELL REGULATOR CO. Indoor-outdoor thermostatic control. See New Products review, p 160. For full data, circle No. R50 on coupon on p 236.

MOHAWK DOOR CO. Eight-foot-high interior doors fit the standard module of the Research House. The floor-to-ceiling height eliminates need for a panel over door. For full details, circle No. 51 on coupon on p 236.

REFLECTAL CORP, subsidiary of Borg-Warner. Betocel foamed light-weight insulating concrete floor slab. For full data, circle No. R52 on coupon on p 236.

JAMES B SIPE & CO. Urethane paint is mixed from two ingredients at the job site. It can be brushed, sprayed or rolled. Inside coats include a sealer and one coat of urethane, outside coats require a sealer coat and two urethane coats. For full data, circle No. R53 on coupon on p 236.

* STANLEY WORKS. Special hardware for surface-mounted doors, including new hinges and new refrigerator-type latch and strike. Brushfinished brass. For full data, circle No. R54 on coupon on p 236.

WHIRLPOOL CORP. Thirty-six-inch width of the refrigerator helps it fit into the 4' module of the South Bend Research House. See New Products review, page 153. For full data, circle No. R55 on coupon on p 236.

These products were also used in the research house

AMERICAN-STANDARD. Kitchen sink, garbage disposer, hot water heater, bathtub and wall-hung water closet. For full data, circle No. R56 on coupon on p. 236.

AMERICAN VITRIFIED PRODUCTS. Ceramic tile heat duct with accessories For full data, circle No. R57 on coupon on p 236.

AMOS-THOMPSON. Molded kitchen drawers of high-impact polystyrene. For full data, circle No. R58 on coupon on p. 236.

UNION CARBIDE PLASTICS. Entrance closet lighting; rigid vinyl light-diffusion sheeting. For full data, circle No. R59 on coupon on p 236.

BRIDGEPORT BRASS. Copper pipe. For full data, circle No. R60 on coupon on p 236.

CONDENSATION ENGINEERING. Prefabricated Vitroliner fireplace chimney. For full data, circle No. R61 on coupon on p. 236.

DURETHENE. Slab vapor barrier, 4-mil polyethelene film. For full data, circle No. R62 on coupon on p 236.

EMERSON PRYNE. "Instant Heat" infra red bathroom ceiling heater. For full data, circle No. R63 on coupon on p 236.

FRIGIDAIRE. Counter-top range and oven under range. For full data, circle No. R64 on coupon on p 236.

GENERAL ALUMINUM. Combination screen-storm doors. For full data, circle No. R65 on coupon on p 236.

INDEPENDENT NAIL. Nails for roof panel connections. For full data, circle No. R66 on coupon on p 236.

NATIONAL ELECTRIC PRODUCTS. Electrical surface-mounted base-board raceway in bedrooms. For full data, circle No. R67 on coupon on p 236.

NIBCO. Copper plumbing fittings. For full data, circle No. R68 on coupon on p 236.

NUTONE. Bath and kitchen exhaust fans. For full data, circle No. R69 on coupon on p 236.

OBRIEN. Interior paint. For full data, circle No. R70 on coupon on p 236.

PEASE WOODWORK CO. Pierson sashless windows. Product review, H&H June '58. For full data, circle No. R71 on coupon on p 236.

PROTECTION PRODUCTS. Woodlife preservative treatment of redwood plywood and window frames; P A R protective redwood stains. For full data, circle No. R72 on coupon on p 236.

PITTSBURGH PLATE GLASS. Glazing. For full data, circle No. R73 on coupon on p 236.

RUUD MFG. Sanifax dishcleaner. For full data, circle No. R74 on coupon on p 236.

SIMPSON TIMBER. "Combed" redwood batten plywood for exterior wall panels and redwood beam facing. For full data, circle No. R75 on coupon on p 236.

SQUARE D. Electrical service panel. For full data, circle No. R76 on coupon on p 236.

TRUSCON STEEL. Hollow metal exterior doors. For full data, circle No. R77 on coupon on p 236.

US GYPSUM. Sheetrock gypsum board for interior panels and dropped ceiling. For full data, circle No. R78 on coupon on p 236.

US PLYWOOD. Panifiex Bi-Fold closet doors and hardware. For full data, circle No. R79 on coupon on p 236.

WIREMOLD. Plugmold electrical surface-mounted baseboard raceway. For full data, circle No. R80 on coupon on p 236.

YALE & TOWNE. Exterior door locksets and bath accessories. For full data, circle No. R81 on coupon on p 236. /END

Round Table Panel

FROM BUILDING RESEARCH INSTITUTE Charles Topping, president

Harold Horowitz, technical secretary

O. L. Pierson, chairman plastics study group

FROM MANUFACTURING CHEMISTS ASSOCIATION

Frank Carman, technical director

William Demarest, director Plastics in Building

FROM NATL ASSN OF HOME BUILDERS

Ralph Johnson, research institute director

FROM THE SOCIETY OF PLASTICS INDUSTRY

William T. Cruse, exec vice president
Martin Armstrong, staff counsel

PLASTICS PRODUCERS

ALLIED CHEMICAL-PLASTICS DIVISION

T. J. Kinsella, president

Maurice Bigelow, technical director

AMERICAN CYANAMID-PLASTICS & RESINS

R. A. Hoekelman, dir, customer relations

L. J. Francisco, general manager

V. V. Lindgren, technical director

BORDEN CHEMICAL

Eugene Sullivan, exec vice president Stephen Paliska, asst manager, coatings & adhesives

CELANESE

J. W. Martin, mgr market research

DOW CHEMICAL—PLASTICS DIVISION

W. C. Goggin, technical director

E. I. DUPONT DE NEMOURS

J. E. Dean, dir of sales, film dept

A. B. Ness, research dev mgr, film dept

C. B. Bell, dir of sales, polychem dept

Milton J. Rodell, mkt dev mgr, polychem dept

Charles Topping, sr architectural consultant

DUREZ PLASTICS (HOOKER CHEMICAL)

A. W. Hammer, Jr, vice pres, gen mgr

EASTMAN CHEMICAL—PLASTICS DIVISION

David C. Williams, vice president
Dennis Guthrie, advtg manager

B. F. GOODRICH CHEMICAL

J. R. Richards, vice pres-gen sales mgr

C. H. Manring, sales dev manager

HERCULES POWDER-CELLULOSE PRODS

Emmet Hixon, manager plastics sales
Philip Robb, dist sales manager

KALWALL

Robert A. Keller, treasurer

KOPPERS-PLASTICS DIVISION

D. L. Eynon, Jr., vice pres, gen mgr Carl Pottenger, vice pres, asst div mgr

C. A. McElhone, technical director

LUMINOUS CEILINGS

Arthur W. Segil, eastern manager

MINNESOTA MINING & MANUFACTURING

C. W. Walton, general manager

D. W. Maher, merchandise manager

MONSANTO CHEMICAL-PLASTICS DIV

M. F. Gigliotti, manager plastics div

NATIONAL TUBE (US STEEL)

NAUGATUCK CHEMICAL, DIVISION OF US RUBBER

John Stehle, commercial development

NOPCO CHEMICAL—PLASTICS DIVISION

Benjamin S. Collins, chief dev engineer

OWENS-CORNING FIBERGLAS-PLASTICS DIVISION

W. N. Keller, general manager
Philip Williams, manager market dev

PHILLIPS CHEMICAL—PLASTICS DIVISION

George Wash, vice pres, dir of sales Walter B. Clark, sales manager

RESOLITE

Kenneth H. Beer, exec vice president

ROHM & HAAS

O. L. Pierson, lab head prod dev

A. R. McFarland, sales development

UNION CARBIDE—PLASTICS DIVISION

L. K. Merrill, vice pres technical
Clayton S. Myers, project manager

UNION CARBIDE—VISKING DIV

Elliot Balestier, Jr, asst to president

WASCO

W. D. O'Morrow, general sales manager

ARCHITECTS

Edward Fickett, Los Angeles John Highland, Buffalo, N. Y. Paul Kirk, Seattle, Wash. George Nelson, New York City

BUILDERS

Martin Bartling, Knoxville

Ernest Fritsche, Columbus, Ohio
G. E. Mefferd, St Louis

Andrew Place, South Bend

Robert Schmitt, Berea, Ohio

David C. Slipher, New York City

Stephen Smith, Salt Lake City

BUILDING CONSULTANTS

Carl Boester, Lafayette, Ind. Leonard Haeger, Levittown, Pa.

DISTRIBUTORS

William D. Fairly, president Martin Lumber Co

George Hermach, president Architectural Plastics Inc

GOVERNMENT

Neil Connor, director Architectural Standards Div, FHA

HOME MANUFACTURERS

Richard Pollman Thyer Mfg Co

Donald Scholz, president Scholz Homes

John White, vice president American Houses Inc

UNIVERSITIES

Albert G. H. Dietz professor of building engineering Massachusetts Institute of Technology

Rudard Jones, director Small Homes Council University of Illinois

James T. Lendrum, head Department of Architecture University of Florida

C. L. Wilson
research professor of chemistry
Notre Dame University

MODERATOR

P. I. Prentice, editor & publisher House & Home

ROUND TABLE



suggests that the breakthrough of plastics in housing may come sooner than you think

"Builders want anything in plastic that will reduce their on-site labor, because the high cost of field labor is pricing housing out of the market. We are interested in plastics not as a substitute for existing materials but as a means of building with lower labor costs."

—Builder Andrew Place, '58 chairman of the NAHB Research Institute

"Plastics can be designed to do anything that builders want them to do."

-Charles Topping, senior architectural consultant of E. I. du Pont de Nemours and president of Building Research Institute

Building professionals who have gone farthest in research to cut their costs know they want plastics in new forms. And plastics producers know they can give them what they want, once they get specific. The question is: how soon will the housing industry get the plastics it needs in the forms it needs and at the prices it can afford to pay? What is the delay?

To explore this problem, House & Home brought the two sides together for a two-day Round Table discussion. Invited were over 20 architects, builders, home manufacturers, construction experts, and materials dealers and nearly 50 plastics producers, distributors, university professors, and other plastics experts.

There was no attempt to reach hard and fast agreement now. There was an attempt to exchange information that can lead to agreement later.

The Round Table served the all-important purpose of showing both sides—the giant, fast-moving housing industry and the giant fast-moving plastics industry—what research and communications gaps exist. And it suggested ways they can be overcome.



HIGHLAND: Mental blocks are the most expensive things that go into a



Often you can use a higher cost material if you take out associated



less, illiterate and uneducated.



information available than builders realize.



We prefabricators need the lightness of

At the Round Table, there seemed to be little doubt that people in both industries are frustrated, as well as hopeful, about more use of plastics in houses. Charles Topping, president of BRI and senior architectural consultant at

"The building industry is not as attractive as it should be to the chemical industry. The virtual absence of building science makes it difficult for builders and architects to describe their needs in the precise definitions the plastic people must work with. What is needed is basic building research that will quantify



We don't dare go off half-cocked. We want to go slow.

Pinpointed: the biggest single problem is communication between the housing industry and the plastics industry



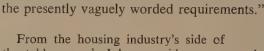
We used plastics 27 different ways in the NAHB Research



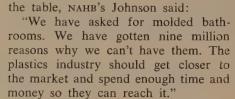
The plastics indus-try would like suggestions as to forms, shapes and colors vou want.



TOPPING: out what the prob-lem is we have a tough time finding out who can give us the real dope.



Dupont, stated the problem this way:



And Builder Place pointed out: "Three years ago Dave Slipher pleaded at the bathroom Round Table for a wall-hung toilet to fit a 55/8" wall. The answer was it couldn't be done. Now we have it. And last year 30,000 mobile homes 10' wide rolled down the road as molded, integrated units. Why do we have to stick with little pieces and parts?"

From the plastic industry's side of the table, Wasco's O'Morrow said: "We have to wait 10 to 20 years before the builder or architect will use our products. We offer them a prototype. They say, 'We like it. Give it to us in several colors and sizes, and give us a cost comparable to what we are paying now, and maybe we will buy it."

Borden Chemical's Paliska added: "We have liquids that should permit a spray-on application for flat decks or for pitched decks. But we have only X years of records. We can't very well offer these products to builders because they want a guarantee. The first question builders ask is, 'Where have you used it?" "



HERMACH: Who can the architect or builder turn

to for information on plastics? There

no text-books.

ANDERSON: ANDERSON:
I can tell you plastics for houses are inevitable. The materials are here today. Prices are competitive and will continue to be lower.



Until there is basic thinking in terms of



components, you will get a few orders for pipe or skylights but you won't get far in the housing field.



WALTON: We want to helpwaste our talent, time



CRUSE: We a We are very conscious of the big potential for plastics in home building.

Suggested: the key to progress is cooperation

MIT's Prof Dietz reminded the Round Table: "When concrete was first introduced to the builders, everybody tried to use it pretty much the way they had been using stone Let's work together to select the most efficient shapes and learn to live with these shapes."

"In other industries," said Walton of Minnesota Mining, "new products have been developed by cooperation between our technical people and their technical people. But we have a hard time finding the technical people in your industry who can 1) provide us with technology we need, and 2) provide some promise of the volume we need to make our investment in research and development worth while."

And, said Allied Chemicals' Bigelow: "We can't put up houses in laboratories the way builders do it in the field. We must experiment with the help of builders and architects."

Monsanto's Gigliotti explained: "Our plastics industry is not conservative. We like to pour stuff out, to mold it almost any way you want. We are willing to take risks based on your experiments. You could have pre-wiring, pre-finishing, pre-roofing right now. Just get yourself a plastics man and work with him."

Andy Place said: "There is indeed a lack of communication between our two industries. What we need is more research. This research is going on. Our Builders Research Institute now has over 100 members who will test products as you manufacturers bring them to us. The builders will absorb an awful lot of this research. Tell us how you want your products used, where you want them used, and give us full data."

Architects and builders proposed exciting ways plastics might make houses cheaper and better



PLACE:
We want foams we can spray on the floor so we can have resilient floors.



SMITH: In the past 10 or 15 years, there has been greater change in home building than in industry as a whole.



MANRING: Cocooning has been used for 15 years. You can envelop a whole building, and it's excellent weatherproofing.



FRANCISCO: Laminated plastic on built-in-furniture is standard on all ships



MEFFERD: We find that architects are starting to use some of our panels.

FICKETT:
Why should plastics have to look like wood panels or ceramic tile? Why can't it look like plastic? It can be a beautiful material!



MYERS: Sprayed plastic has been valuable in preparing roofs in the industrial field.



POLLMAN: If the ideal were possible, a 1,200 sq ft house would have only 5,600 sq ft of coatings.

The suggestions (listed below) made at the Round Table left no doubt that plenty of architects and builders have plenty of interest in plastics—they want products ranging from replacements for existing products to entirely new systems for putting houses together. And the sooner the better—in as finished a form as possible. "Please give us plastics in finished forms—field labor costs 9ϕ a minute," said Andy Place, reflecting most builders' main interest: lower labor costs.

Here are some of the Round Table's ideas:

"The roof is wide open for use of plastics," said Builder G. E. Medford. "Little has been done about improving the roof in 30 years. We pay 85¢ a sq ft for a cathedral roof. If we could get something in plastics that will span 40′ and go up in units 10′ or 12′ long, we would have a welcome material."

"Pre-stressed plastic bents," Architect John Highland said, "would help enclose larger areas. We want a bent giving us a 20' or 30' span, hinged at the center and giving us a side support and roof support with no problem of flashing at the joint."

"New shapes are entirely feasible for houses," Builder Martin Bartling said. "We could even take bubbles if the cost was right. But if the new shapes are equal or higher in cost you will find no more conservative customer than a builder."

"We want big pieces," Andy Place insisted. "How about walls 30' long? Anybody can rent a lift. There's no problem."

"Plumbing offers a tremendous possibility," said Bob Schmitt. "Present requirements say plumbing must be buried in the walls forever, so materials and workmanship must withstand extreme tests. With plastics you might make everything exposed, so you would have no long-term need for leak-proofing."

"Plastics can give us an entirely new concept in plumbing," Architect Ed Fickett said. "It offers much more than simply another way to make connections. If we're going to plumb the way we have the last 50 years, the heck with it." (For more on plastic plumbing, see next page and page 114.)

"Luminous ceilings that are also acoustical are needed," said Architect John Highland. "So are kitchen cabinets with acoustical laminates. We certainly need brighter colors that will be permanent. We want outside patio floors that are stable in dimensions and have permanent color. We need flush doors that don't warp."

"We want an adhesive with some wonderful qualities," said Small Homes Council's Rudy Jones. "It must be mold resistant. It should have casein's gapfilling quality. It should be non-irritant to the worker. It has to be weatherproof. It must adhere to woods with varying moisture content, have a working time of one to two hours, cure in four to eight hours at temperatures of 40° or above, and require only the handling pressure we get with nails or staples. It should have great strength and a rigid joint."

"Transparent plastic cocoons might save some of the 5% of bathtubs and lavatories now damaged on the job," said Dave Slipher.

Some of their ideas sound blue-sky

"Why not soft walls?" asked Architect George Nelson. "We got to playing with this idea and it could lead to a totally different wiring system." But he added: "Architects and industrial designers must have a built-in right to fail in any real experiments using plastics in houses."

"We want foams to spray on the

floor so we have resilient floors," said Place. "Why can't we spray on 20 mils? And why can't we have a plate seal that will also check termites?"

"A sprayed plastic that can be placed as a continuous skin" was urged by Architect Paul Kirk. "It might be done on a wire shield or skin and would have no joints."

Plastics experts said that many of the things the architects and builders asked for already exist. For example...

Experts said the housing industry will soon have low-cost plastic pipe

Building professionals at the Round Table said they want flexible plastic pipes more than almost anything else—because plumbing is one of their biggest problems. Plastics manufacturers said: 1) these pipes have been developed, and 2) they should be not only cheaper to buy but also cheaper to install.

Two reasons more plastic pipe is not in use: there are still plenty of code problems, and the plastics industry has not done much to promote its use in houses.

Here is what the architects and builders learned:

"Plastic pipe for cold water is already here," said William Cruse of the Society of Plastics Industry. "It is extensively used in California. In Pomona, thousands of houses have water supply lines made of cellulose acetate butyrate. California's Public Utilities Commission has redrafted its plumbing code to make this pipe easy to use. And Wisconsin has amended its code the same way, for rural areas."

Plastic pipe for hot water supply in the easy-to-use form builders want it and at a low price per foot or pound—has also been developed.

"We have it," said the plastics people. "But," they added in the same breath, "you can't have it yet."

Here is how National Tube's Anderson described the product:

"It is or will be heat-resistant enough to carry hot water up to 180° or even 212° under pressure. A half-dozen firms are making real progress. Joining—with solvent cementing—is simple. It has been established once and for all the plastics we are using are not toxic. Health authorities will probably give you no trouble on it for carrying potable water. Soon, it will not be any more expensive than plastic pipe suitable for low-temperature water. It will sell for a lot less than copper."

When it was pointed out the building industry might provide a market roughly equal to 75% of the plastic industry's present pipe volume, he implied the price might drop even lower.

On the subject of testing, Anderson said: "In determining how long this pipe will last, data from really short-run tests are practically meaningless. The only way to test the life of these hot-water pipes is to conduct long-life tests."

Boester made this point: "We know now what plastic pipe can stand under ranges of temperature and pressure. We could use the pipe now by installing a pressure-temperature relief valve, set well below the characteristics of the chosen pipe, at the hot-water heater. For extra protection, we could install two in parallel—which is just what we've done in the Knoxville Research House" (p 114).

Various plastics experts did indicate that the pipe might be widely available within a year. Until now, it has been used without guarantees and almost wholly in experimental houses.

Plastic sewer mains in the streets are also being used in California, said Cruse. "And they have a cost advantage. This pipe is 6" in diameter. Its cost advantage is in installation, length of service and corrosion resistance."

This disadvantage of plastic lines was conceded by Anderson: "While they will take the most violent chemicals used for cleaning, you could chop right through the side of the pipe if you used mechanical cleaners to unstop clogged lines."

Said Place: "We could handle this kind of plumbing like an automobile motor. You can change sparkplugs in a car. We probably could do the same thing with plastic pipes."

FHA's Neil Connor made it clear that his agency will not insist forever that plumbing last for the life of a house. "If you can pull these pipes out easily at the end of five or ten years, and snake it back in easily, that's okay. We don't insist on a 20 or 30-year paint period, for example. There's an allowance in the valuation process for these things."

To learn the status of plastic panels and to see what experts think about plastics' acceptance . . .turn to p 210



BOESTER:
Perforated plastic
pipe is excellent for
handling sewage. It
might solve a big
problem for septic
tank systems.



HAEGER: Mechanical items represent 18% to 20% of the costs in a house. This is the greatest potential.



We will have plastic pipes for hot water in a year or two and I think we'll have some price advantage, too—either in initial cost or inplace cost.



GIGLIOTTI: Let's deal with closets as closets and bathrooms as bathrooms.



o'MORROW: Everything you need in plastics—in fact much more than you have talked about is available.



Photos: James T. Strong

SCHOLZ'S NEW MARK 59 is set off by large trees and skillful landscaping.

How to design for the market

"The plan and design of this house are based on everything we've found that spells 'sell' in today's mass market."

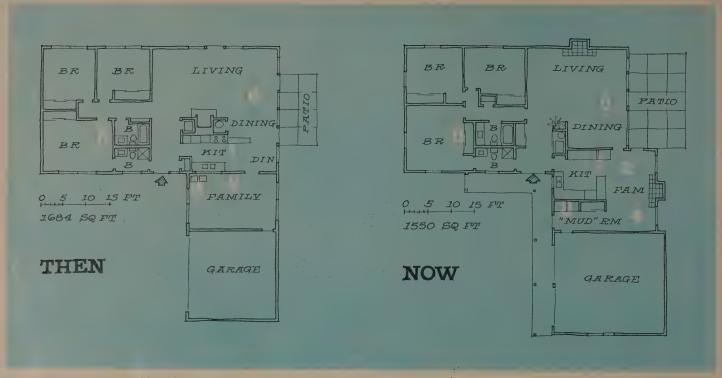
So says its designer—Don Scholz, Toledo builder and one of the largest prefabricators in the US. Many builders and designers who recognize Scholz's market sense and his grasp of what buyers want, are quick to follow his lead.

The Mark 59*, his newest big promotion house, is significant on two counts: 1) it is a departure from the pure contemporary design of his Mark 58 (H&H, Dec '57); 2) it is a return to his best-selling "California contemporary" (5,000 sales in five years)—but with important changes in plan and design.

For a close look at the changes, turn the page.

JANUARY 1959

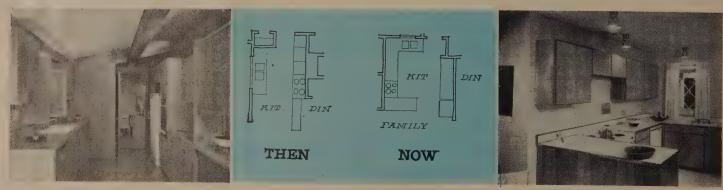
^{*}Four models from \$14,000 to \$28,000 with land.



CONTRAST IN PLANS (with major changes numbered), shows contemporary planning of the new model: Scholz planned the Mark 59 from the inside out—adapted his structure to a better traffic pattern,

better use of space, and better separation of areas. This, he notes, added to his costs because it called for a greater variety of panels than he used in the original model.

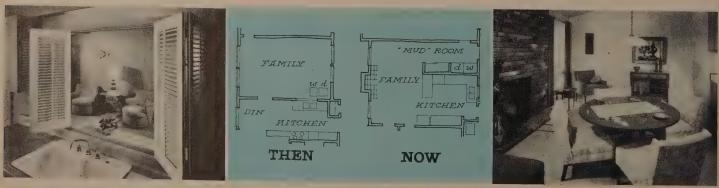
"Here is how-and why-we changed the plan"



1. "Today's buyers want a U-shaped kitchen with an outside window"

"And," says Scholz, "they no longer want their equipment on opposite walls, as in our original kitchen (left). This was an interior, double in-line kitchen—what looks like an outside

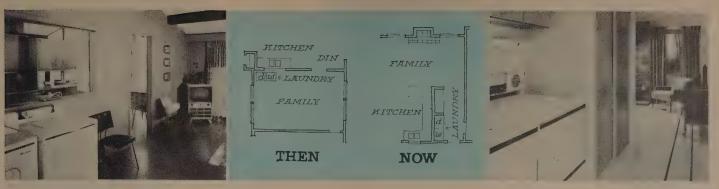
window is really a shuttered pass-through to the recreation room. In our Mark 59 (right), the kitchen is U-shaped, an outside window gives a view of the front entry."



2. "Today's buyers want a big combination family room and kitchen"

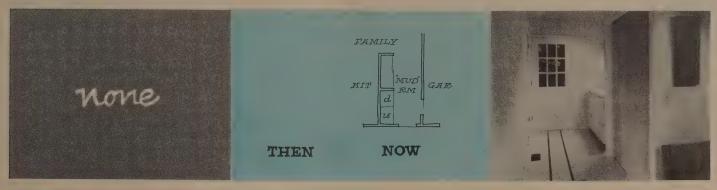
"In our original model the family room (left) was open to the kitchen only through an interior window. But in our Mark 59 (right) we have combined the family room and kitchen

into a big comfortable living kitchen for the whole family. This lets the housewife in on family activities, but still isolates kitchen functions in the U-shaped work space."



3. "Today's buyers want their laundry in a separate area"

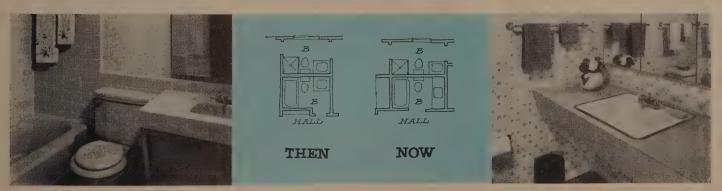
"If you put the laundry in the kitchen, you reduce kitchen cabinet space and have no room for laundry storage. If you put it in the recreation room—as in our original model (left) the room is neither fish nor fowl, flot wholly a living area or wholly a work area. So in the Mark 59 we put the laundry off by itself (right). This left space for a laundry closet, which women like."



4. "Today's buyers want a 'mud room' to keep dirt out of the house"

"There was no 'mud room' in the original house—the service entrance was through the garage and into the family room. But now a 'mud room' with its own outside door is a top plan-

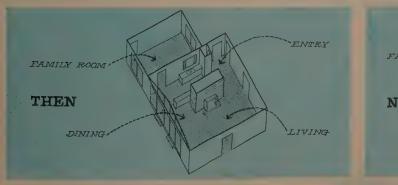
ning trend. Where to put it? Your best bet is probably in the laundry as in the Mark 59 (right). What better place to shed dirt-encrusted clothes before going on into the house?"

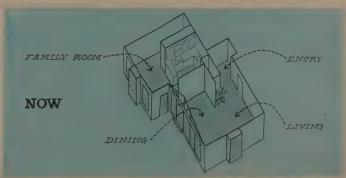


5. "Today's buyers want bigger counters in their bathrooms"

"In the Mark 59 interior bathroom (right), we get space for a big vanity by putting fixtures on two walls instead of on one wall as in the original model (left). Incidentally this change

also gives us space for a big mirrored medicine cabinet and adds to the feeling of roominess in a confined area. It also permits two wash bowls—standard in our four-bedroom model."

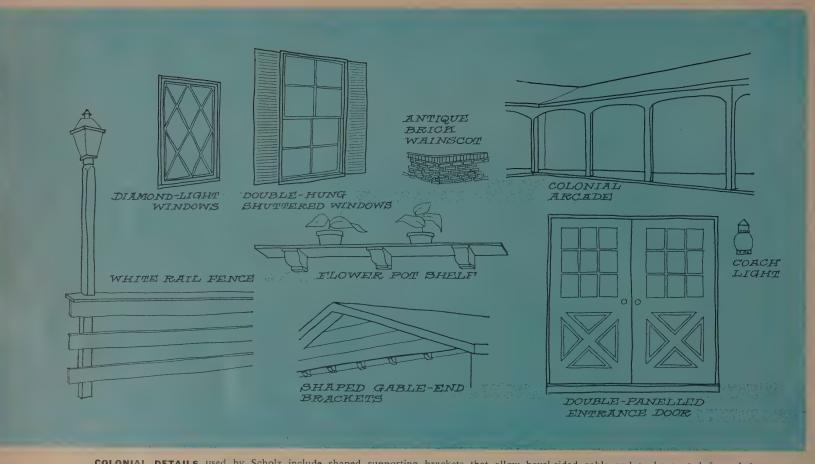




6. "Today's buyers no longer want wide-open planning"

"Open planning, with the kitchen open to the formal dining and living areas as in our original model (left), was popular for years after the war, Now it's deader than a dodo. People

want their formal dining and living area shut off from the kitchen as we have it in the Mark 59 (right). The one exception: the family room should open to the kitchen."



COLONIAL DETAILS used by Scholz include shaped supporting brackets that allow bevel-sided gable end to be vented from below.

"We feature colonial details in frontand open the rear for outdoor living"

"It is almost impossible to sell pure contemporary in today's mass market," Scholz claims.

"Contemporary ideas like studio ceilings, glass gable ends, and indoor-outdoor living are more popular than ever. But colonial details outsell clean simplicity, 100 to 1."

Many architects will none the less frown on Scholz's mixture of traditional and contemporary details. These critics argue that good design must be "all of a piece." They point to the traditional door next to the contemporary glass gable end of the Mark 59 (photo, right) as an example of two incompatible features.

"But," says Scholz, "this is what home buyers want. So far as I'm concerned, it's a matter of people's preferencesnot designers' dogma."



FRONT ELEVATION of Mark 59 has colonial details (shown in drawing at top of page), which, Scholz points out, "say 'home' to buyers."



REAR ELEVATION features big glass gable end. Family room (left), dining area (center), and living room (right) have access to terrace.

Scholz is also giving builders more merchandising help

Here he says is how he is making merchandising easier for his builder-dealers:

He is making it easier for builders to finance model houses

He will make available automatic financing up to 80% of the cost of display houses. So, he points out, his dealers who own lots will be able to build a model without investing any cash.

"Most builders don't need to be sold on the importance of a display model, Scholz says. "They're already sold. What they need is the financing to make it possible.

He is making it easier for builders to furnish model houses

Scholz dealers will be able to finance purchases of furnishings from three companies (Broyhill, Bigelow-Sanford, Celanese) at about one-third of retail prices.

Furnishing cost per model will be roughly \$1,500 or, if financed over 24 months, \$80 a month (\$95 in the West).

Builders will get a choice of three furnishing packages. Each will include fur-niture and carpeting for the living room, dining room, family room, and one bedroom (Scholz suggests leaving two bedrooms unfurnished to hold down costs.)

Scholz will also send out accessories (ash trays, china, pictures, etc.) "to give the house a lived-in look.

He is making it easier for builders to promote model houses

Three consumer magazines (McCall's, House & Garden, Living for Young Homemakers) will publish different Scholz models in the late spring. The plan is for each to list builders names and modelhouse locations. Local stores handling Broyhill furniture will tie in with promotion.

At least 15 makers of brand-name building products are expected to join Scholz in national advertising. Several plan to feature Scholz houses on network TV with local break-ins to give directions for reaching nearby models.

Trade-in and trade-up—

The 100 billion \$\$\$\$\$ key to better homes for everybody

EDITORIAL

"The biggest help we still need from Congress and the President is a financing tool to make it easy for home owners to trade-up to better homes by trading in their present homes, just as car buyers trade in their old cars.

"That tool need not cost the taxpayers a penny, but it could easily triple the sale of better new homes.

"We cannot raise the American standard of housing through trade-up as long as the Government puts needless restrictions on trade-in financing that make trade-in almost unworkable in housing".

So says Nels Severin, President of the National Association of Home Builders, and he is quite right.

But too few men in Congress, too few in the Administration (and too few in the housing industry, for that matter) seem to understand why trade-in and trade-up are so important; and too few seem to understand how little change in Federal legislation and Federal regulations is needed to make trade-in and trade-up easy.

Until we get these small changes, most of the millions of families who can now afford much better homes will go on living where they are. But once we get these changes, these millions of families can start trading up, each moving to a better home and using its equity in the old house to provide a more-than-adequate down payment on a better home.

In other industries trade-in and trade-up are easy, because other industries can get close to 100% floor financing for their trade-in inventories.

But the housing industry is hamstrung with unique restrictions that put lower limits on 30-day credit for a builder's trade-in house inventory than on 30-year permanent mortgages. For example, FHA can insure 30-year mortgages for 97% of valuation, but it can insure trade-in financing for only 70.07% of valuation. The Federal Savings & Loans can make 90% amortized mortgages for 25 years, but only 60% short term loans on trade-ins; and the national banks, which provide nearly 100% floor financing for trade-in cars, are forbidden to put up more than 66% for short term loans on trade-in houses.

Very few builders and very few realtors have the working capital to put up 30% to 40% cash to handle trades. Very few can afford

to tie up in an old house three or four times the profit they hope to make on the new house. And the Federal tax collectors often make the problem worse by taxing away 52% of the new house profit before the builder can get that profit out of the house he took in trade.

We have never heard anyone defend the discriminatory restrictions on trade-in financing for houses. We do not believe anyone supports them. And we hope the Administration and Congress will take effective action to end this unfairness as soon as Congress meets.

Here are the five simple changes we need

- 1. Amend the national bank laws to let national banks offer 80% short term floor financing for trade-in houses, just as they can now offer 80%-or-better floor financing for used cars.
- 2. Let the s&L invest a limited percentage of their funds in short term unamortized 80% loans not only on separate trade-in houses but also on a builder's or realtor's revolving inventory of trade-in houses placed in a trust. This is perhaps the most essential change, for most trades will have to be financed locally and the s&Ls provide well over half of all local financing and well over half of all financing for used houses.
- **3.** Let FHA base its trade-in financing insurance on FHA's appraisal of the house, instead of the builder's acquisition cost, which must almost always be 10% or 15% less than the re-sale price to give him a minimum margin for his

- selling, re-financing, and carrying costs. Otherwise, FHA trade-in financing will still make the builder put at least 29.93% of the valuation into the deal—which is far more money than most builders can afford to tie up in a trade.
- 4. Let FHA streamline its trade-in procedure to cut the cost of making two mortgages where one would do. To that end, just permit a simple substitution on the permanent mortgage for the trade-in house with 15% held in escrow until a buyer is found for it. (Today two separate mortgages are needed—one permanent mortgage for the buyer, one temporary mortgage for the builder for 15% less.)
- **5.** Amend the Revenue Act so a builder will no longer have to pay the Federal tax on his new house profit until he can get his cash out of the trade-in house.

This five-point program was developed and unanimously approved by a Round Table of industry leaders sponsored by House & Home. The five changes will not end the housing industry's shortage of mortgage money, but they will start unfreezing all the equity money needed for a housing advance beyond our fondest dreams—a housing advance so broad, so deep, so long, that it could carry the whole American economy onward and upward in its sweep, a housing advance so strong and dynamic that it could assure many years of prosperity and full employment for everyone, for . . .

Home owners have 100 billion \$\$\$\$\$ equity frozen in their present homes

This hundred billion \$\$\$\$\$ is far more equity money than these home owners need to live in the kind of homes they live in now. With maximum financing it is at least ten times the equity money

they would need to buy all their present homes FHA. It is twice the equity money they would need to buy all their present homes 20% down.

This hundred billion \$\$\$\$\$ is all the equity money we need to let every American family trade up to a far better home. It is all the equity money we need for ten million new quality homes—quality homes costing \$17,500 or more.

But until the Federal Government makes it less difficult for home owners to unfreeze their excess equities and re-use them to trade up, most of the families who can now afford to buy much better new houses and much better old houses will have to go on living where they are. In brief:

Until we can unfreeze this 100 billion \$\$\$\$\$\$

- 1 The home builders will have to go on seeking a large part of their sales from first-time buyers; most of them young couples without much money; young couples whose incomes are still too small to carry a quality house.
- 2 The home builders will have to pass up most of the sales they could and should be making to second-time buyers—including most of the sales they could and should be making to the 8 million presently under-housed families who can now afford to pay \$17,500 plus.
- 3 The home builders will have to sell new shelter on terms to families with below-average incomes instead of selling new comfort and happiness and better living on terms to families with above-average incomes (the non-farm average is now about \$5,600).
- 4 Other industries will continue to sell circles around the homebuilding industry in competition for the growing consumer-dollar; housing will continue to get a smaller and smaller share of the family budget; and the American standard of housing will continue to lag further and further behind the meteoric climb in the rest of the American standard of living.

Every other big durable goods industry finds its best prospects among present owners trading up. Nearly nine new cars in ten are sold on trade-ins to present owners who want something new and better. That's why the auto industry has been able to upgrade its product every year. That's why the American standard for cars has raced ahead of the American standard for homes.

Owning a car makes it twice as easy to buy a new and better car, but owning a house makes it twice as hard to buy a new and better house—because we still don't have a good trade-in plan.

That is why the home builders find the present homeowner their toughest prospect instead of their easiest sale. And that is why the home builders are still stuck in the low-priced market, trying to sell shelter in stripped-down models to first-time buyers instead of selling better, easier, and happier living to second-time buyers in quality houses packed with the new sales appeals that could and should make yesterday's house as obsolete as yesterday's car. /END

HOMES FOR BETTER LIVING AWARDS

As in 1956, and 1957, and 1958, House & Home and thirteen national organizations associated with the housing industry, listed below, will cooperate with the AIA in the Awards. This year, for the first time, they will be joined by McCall's Magazine.

This year, as in the past three programs, awards will be made to the best custom - built and builder - produced houses designed by a registered architect and erected during the past three years in one section of the US.

Here are the principal conditions:

You must send in your entry slips by March 31, 1959.

Your entry must be postmarked before midnight, May 1, 1959.

The house must be designed by a registered architect (but it may be submitted by the builder, owner, or architect with the approval of the others).

And you must follow the program rules (printed in part below) which will be sent to you when you send your entry slips.

The award-winning houses will be given the widest publicity: They will be exhibited at the AIA Convention in

New Orleans and at the Octagon in Washington. They will be published in House & Home. They will be publicized on radio and TV and in the national and local press.

For 1959 the area is the South.

The houses will be chosen by a distinguished jury of architects, builders, land planners and the editors of House & Home and McCall's Magazine.

Last year the jury for custom houses included: John Burchard, Dean, School of Humanities, MIT; Alexander Cochran, AIA; Percival Goodman, AIA; Olindo Grossi, AIA, dean of architecture, Pratt Institute; Mary Hamman, Modern Living Editor, LIFE Magazine; Morris Ketchum, Jr, AIA; and P. I. Prentice, Editor & Publisher, House & Home Magazine. For merchant-built houses, the jury included: Neil Connor, AIA, director of architectural standards, FHA; John Dickerman, Exec Director, NAHB; Leonard Haeger, AIA, HOUSE & HOME consultant; Carl Koch, AIA; Arthur Piper, associate editor, House & Home; Chloethiel W. Smith, AIA.

Some of the award winning houses from earlier years are shown at the right.







Michael Destrey





Cooperating Associations: -

American Bankers Association American Institute of Decorators American Society of Landscape Architects Institute of Life Insurance Mortgage Bankers Association National Association of Home Builders National Association of Mutual

Savings Banks National Association of Real Estate Boards National Retail Lumber Dealers Association Home Manufacturers Association Producers' Council, Inc. US Savings & Loan League US Chamber of Commerce

Here are the rules in part: -

The houses submitted must be built since January 1956 and located in: Alabama, Arkansas, Florida, Georgia, Louisiana, Mis-sissippi, North Carolina, South Carolina, Tennessee, Texas.

Awards will be made in two major categories:

- 1. Houses designed specifically for an individual owner, divided according to size:
 a. Under 1,600 sq ft of living space.
 b. Between 1,600 sq ft and 2,800 sq ft

 - of living space. c. Over 2,800 sq ft of living space.
- 2. Houses designed for a merchant builder and sold speculatively, divided into three

a. Under \$15,000.

b. \$15,000 to \$20,000. c. Over \$20,000.

All notifications of entry shall be submitted on an entry slip like that printed on p 238, accompanied by a check for \$10 for each house entered. Mail to "Homes for Better Living Awards," c/o American Institute of the control of th each house entered. Mail to "Homes for Better Living Awards," c/o American Institute of Architects, 1735 New York Ave, NW, Washington 6, DC. A separate entry slip shall be submitted for each project entered. Additional slips are available from the AIA, HOUSE & HOME, and McCall's Magazine.

All entries must comply with the regula-tions listed in the program. The program is also available from the sponsor and the principal participants, and will be sent automatically to anyone submitting an entry slip.

Send in your entry slip today. Use the coupon on p 207 or write to the American Institute of Architects, 1735 New York Avenue, NW, Washington, DC







BH&G'S 1959 IDEA HOME will be built throughout the country by builders who want to share in the magazine's big Idea Home promotion. For the first time since the start of the Idea Home program in 1953, BH&G will offer builders a choice of a pilot model (above) and three

variations. The pilot model has 1,730 sq ft of living space: the variations, 1,915 sq ft, 1,712 sq ft, and 1,383 sq ft. Exteriors can also be varied for traditional or contemporary preferences. Each model is planned around a living-working core and for outdoor living.

Here's how to get in on a 1959 magazine house

Rodney McCay Morgan



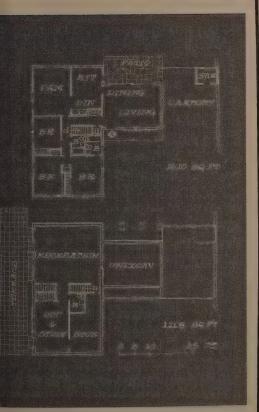
GOOD HOUSEKEEPING'S 1959 HOUSE is a prefabricated model tied in with the "Live Better Electrically" program. Like $BH \\capcal{C}G's$ Idea Home, it offers its builders a chance to benefit from national promotion. The two-level house is particularly suited to a sloping site, also

has plenty of outdoor areas: the grade-floor recreation room opens to a terrace through sliding glass doors; the upper floor has a flagstone patio off the living-dining area. Other features: covered walk from carport to entry, storage room af back of carport.

TERROLES TERROLES TOTAL TOT

PLAN has central core of family room, kitchen, and entry. All living areas open to L-shaped terrace at side and back. Master bedroom opens to walled patio.

promotion



PLAN of upper floor is L-shaped, separates bedroom, family, and kitchen areas from living area where adults entertain. Ground floor is for study and recreation.

Better Homes & Gardens' 1959 Idea Home Program



Pick the plan and style you like from four scale models on display at BH&G's NAHB show booth. You can sign up for the program there or write to BH&G, Meredith Publishing Co, Des Moines, Iowa.

What's in it for you? BH&G will give you: 1) "Coordinator's Promotion Guide"—a timetable on promoting the Idea House from the time you break ground to the model opening; 2) "Builder-Store Promotion Kit"—with newspaper, radio and TV releases, tent cards, merchandise stickers, tags, posters and mats; 3) personal promotion and merchandising help at local level; 4) full-scale editorial takeout in BH&G's September issue with names of participating builders, addresses of all Idea Homes; 5) "Decorating-Merchandising Ideas Booklet"—for stores that will work on furnishing your model.

Parents' 10th Annual Builders' Competition



You submit your own house, get promotion help if it wins. Contest's theme: "The Best Homes for Families with Children." Your entry must be owner-occupied by a family with one or more children, must have been built or sold between July 1, 1958 and June 30, 1959. Judges select up to 10 Merit Award houses and, from them, two National Merit Award winners. For full details, visit *Parents'* NAHB show booth, or write: Builders' Competition for Merit Awards, *Parents'* Magazine, 52 Vanderbilt Ave, New York 17.

What's in it for you? If you win an award, you'll get a Certificate of Merit, posters, displays, seal insignia, banners, radio copy, signs and suggested ad layouts. If your house is one of the two National Award winners, it will be published in an early 1960 issue of Parents', and a \$500 check will be sent on your behalf to any nonsectarian child welfare organization you select.

McCall's Home Certification Program



You enter your house in this program, get merchandising help if it qualifies. Your entry should include some features that women delegates to *McCall's* annual Congress on Better Living say they want in a house. Judges: a panel of architects and magazine editors. For entry blanks and details, visit *McCall's* NAHB show booth, or write: Director, Home Certification Program, *McCall's*, 230 Park Ave, New York 17.

What's in it for you? If your house qualifies, you'll receive: a handsome parchment certificate for posting in your model, tent cards telling about recommended features in your house, weather-proofed site and traffic signs, ad copy, and—if your house is published by McCall's—giveaway reprints of the article.

American Home's "Best House for the Money" Competition



You can enter your house in this contest if you are in one of 18 states picked by American Home because they account for 80% of all new house construction. Judges select three houses from each of the 18 states; the magazine's readers then narrow the choice down to a final winner from each state. By means of special magazine inserts, readers vote only on houses from their home states. For full details and entry blanks, visit American Home's NAHB show booth, or write: Hubbard Cobb, Building Editor, American Home, 300 Park Ave, New York 22.

What's in it for you? If your house is one of the three selected from your state, you'll be awarded a special plaque by an American Home editor at a dinner in your home town where you can cash in on publicity at local and state levels. You'll also receive giveaway folders, road signs, counter cards. If your house is one of the 18 final winners, it will be shown in an early 1960 issue of American Home.

Good Housekeeping's "Live Better Electrically" Promotion



If you want to build the prefab shown at left write to Good Housekeeping, 57th St and 8th Ave, New York 19.

What's in it for you? You'll be able to buy a complete furniture-decorating package—assembled by Good Housekeeping editors—at "substantial savings." You'll be mentioned in the magazine's June issue when the house will be featured in color. And you'll get a complete promotion kit personalized to your requirements in your own community.



FRONT OF HOUSE gets much of its character from the pitched roof. Trellis in center shelters entrance terrace. Carport is at far left.

The roof is important INSIDE this house

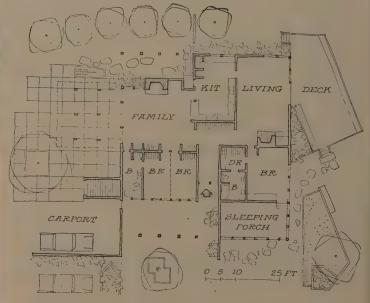
Architect Mario Corbett used it for more than simple shelter against the rain and the sun.

What Corbett did with the roof gives an extra dimension to the whole interior of this rustic but highly sophisticated house. Ceilings follow the gentle slope; and, in the family room (photo opposite), Corbett heightened the dramatic effect by piercing the roof with skylights. To give scale to the high ceilings, low decks intersect each room.

The roof also ties together the rambling plan. Instead of chopping up the roof to fit every offset in the plan (below), Corbett let it sweep out to a nearly continuous eave line. This simple shape is not only better looking, it costs less to build. And it integrates indoor and outdoor living areas because it covers both in an unbroken plane.



TERRACE in front of the house is sheltered by the beams used to frame the roof. Fence at rear screens a private garden which opens off the master-bedroom sleeping porch.



PLAN is zoned into parents and children's areas, separated by kitchen and entrance hall. Beyond roofed terrace outside family room (out of plan to left) is a swimming pool and sheltered garden pavilion.



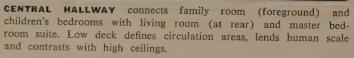
FAMILY ROOM is made exciting and spacious by soaring ceiling, which contrasts with horizontal redwood on walls and deck (upper left).

ARCHITECT: Mario Corbett LOCATION: Ukiah, Calif.





ENTRY opens onto front terrace. Fixed window brightens the hall, gives a glimpse of terrace and mountains beyond. Sculptured panel is recessed into heavy door.





LIVING ROOM (right), like other rooms, has sloped ceiling. Low deck, at rear, extends over fireplace and cabinets. Translucent doors at left open to large balcony overlooking distant mountains. /END

HOUSE & HOME'S ANNUAL HOME SHOW

NEW PRODUCTS FOR 1959

On the following pages you will find reviews of 284 new products—a first look at the building products market for 1959.

Some of these new products may let you make major changes in the way you build your houses. Some others are brand new improvements on familiar products you now use. Still others will do jobs for you that you have never been able to do before.

There is better packaging to help your merchandising; more complete finishing to save you labor. Across the board, you'll find better quality to help you put more livability and value into the houses you design and build.

This is the sort of information you will want in your files. Here it is collected in one 30-page package.* But you may want more information about many specific products and this you can get easily by checking and mailing the coupon on page 236. To help you find what you want to know, the reviews are organized in the following sections:

Kitchens page	152
Air Conditioning	156
Heating	158
Heating Accessories	160
Interiors	162
Doors	164
Flooring	166
Bathrooms	168
Windows	214
Ceilings	216
Exteriors	218

^{*}And there's more to come. In the next few months H&H will feature product areas not covered in this issue: power tools, sliding glass doors, construction equipment, electrical fittings, etc. And other product categories for which space was short this month will be reviewed again in early issues.

KITCHENS & APPLIANCES

In kitchens for 1959 the warmth of wood is being added to the straight-lined look the appliance makers introduced two years ago. Door and drawer fronts are smooth and unbroken, hardware is hidden or inconspicuous. In high-style higher-priced cabinets like those made by St. Charles (below) or Mutschler (H&H, July '58) the clean line is given an airy off-the-floor look. In appliances, the trend is to more automatic operation, simpler controls, easier access to working parts. (See also, H&H, Dec. '58).



This new kitchen is clean lined, off-the-floor

It is made up from modern styled units in St Charles' flexible line of custom assembled kitchens. The cabinets are steel, the doors wood in your choice of woods and finishes. Special built-ins

Beautycraft wood kitchens for 1959 have flush, warpproof doors with birch fronts. Non-warp drawers have smooth working drawer slides. Cabinets are offered with a choice of hardware and finish at competitive prices.

Beautycraft Kitchens, Baltimore. For details, check No. 2 on coupon, p 236

Brammer Kitchens are introducing their new Sheer Line cabinets in two new finishes, driftwood and platinum. The lines of the cabinets are planned to match the straight lines of current appliances. Doors and drawer fronts are flush; hardware is pewter finished.

Brammer Mfg, Davenport, Iowa. For details, check No. 5 on coupon, p 236

from St Charles include the "clean-up" island with its auxiliary sink, sliding shelves in base cabinets, blender and mixer unit, etc. Other St Charles kitchens are made in traditional and provin-

Scheirich kitchens are made in modular sizes, have select birch door fronts, hardwood frames and drawer fronts. Doors are 7/8" hollowcore. All joints are glued and nailed, many with mortise and tenon. Hinges are semiconcealed.

H. J. Scheirich Co, Louisville.
For details, check No. 3 on coupon, p 236

"Country Kitchen" is the name given early American styled cabinets by Major Line. Cabinets are made of native red alder in a nutmeg finish; door and drawer pulls are antique copper. Units are shop assembled, shipped in cartons, priced slightly below birch.

Major Line Prods, Hoquiam, Wash. For details, check No. 6 on coupon, p 236

cial styles. None of these kitchens are stock items; all are custom assembled to meet specific orders.

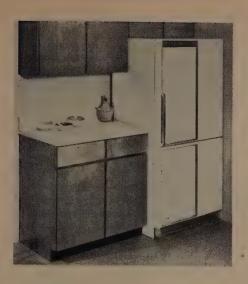
St Charles Mfg, St Charles, Ill.
For details, check No. 1 on coupon, p 236

Kitchen Maid is introducing a new line of cabinets at the NAHB show. Basic units will be in cinnamon fruitwood finish with brass hardware. Also available: nutmeg, cherry, birch, and walnut, or enamel in six colors.

Kitchen Maid Corp, Andrews, Ind. For details, check No. 4 on coupon, p 236

New Nevamar kitchens are designed to meet builder specifications. Drawer and door fronts are plastic laminates in mocha walnut. Interiors are painted in multicolor paint. The new kitchens, brand-named Winn-Maid, will cost 35% less than standard units.

Nevamar Kitchens, Odenton, Md. For details, check No. 7 on coupon, p 236







Westinghouse line features engineering developments

Its refrigerators (left) have new color controls to judge meat preservation; its ranges (center) control roasting by the temperature of the meat; its laundries are more versatile but simpler to con-

trol. Also, the washers have no transmission, the most expensive replacement part costs \$3. Refrigerator mechanisms are quieter than ever: sound is deadened by bubbling the Freon

through the compressor oil. To go with its built-ins, Wetsinghouse also is offering full lines of wood and steel cabinets.

Westinghouse, Mansfield, Ohio.
For details, check No. 8 on coupon, p 236

Yorktowne's Classic cabinets have a new 5-coat fruitwood finish. No drawer pulls are visible, the drawers work as internal sliding shelves. Doors have raised panels, drawers are diamond cut, all hardware is concealed.

Colonial Products, Dallastown, Pa. For details, check No. 9 on coupon, p 236

Long-Bell wood cabinets are made on a 3" module to fit both old and new kitchens. 1959 units will have deeper top drawers, new drawer fronts, new slides, new metal and nylon gliding

Long-Bell, Longview, Wash.
For details, check No. 12 on coupon, p 236

shelves, magnetic catches.

I-XL is showing its fruitwood kitchen in two styles: Traditional, with exposed hardware and fronts with moulded edges; Centennial, with straight-lined clean surfaces. Both have 34" solid core hardwood fronts.

I-XL Furniture Co, Chicago.
For details, check No. 10 on coupon, p 236

Dwyer Products have added an entertainment bar to their line of efficiency kitchen. The new Maitre "D" includes a 5-cu ft refrigerator, lock-up cabinet for bottles, utensil drawer, and cutting

Dwyer Prods, Michigan City, Ind. For details, check No. 13 on coupon, p 236

Manitowoc, a leader in built-in refrigeration, is adding to its line a big 2-zone combination that looks built-in but isn't. It is designed to give builders the built-in look without the built-in expense. Wraparound coils insure 0° cold.

Manitowoc Works, Manitowoc, Wis. For details, check No. 11 on coupon, p 236

Preway built-ins now include a dishwasher. A spin-impeller type, it will fit under a 36" counter, is 24" wide. Full load takes 34 minutes, can be interrupted at any time. Finish is satin chrome or antique copper.

Preway, Wisconsin Rapids, Wis. For details, check No. 14 on coupon, p 236







Whirlpool Corp shows its electric appliance line

The features: new wood-finished refrigerators (left) with even temperature throughout and ultraviolet purifying lamps; new built-in dishwashers (center) with filters in the wash stream to keep food particles from being put back on the dishes; a new low-boy freezer for easy inclusion under a counter (right). New freezers in combinations or in separate units prevent frost-up by circulating dry cold air which absorbs moisture before it can freeze. Whirlpool also makes gas appliances.

Whirlpool Corp, St Joseph, Mich. For details, check No. 15 on coupon, p 236

KITCHENS & APPLIANCES continued



NuTone adds to its appliance lines

Among the features, electronic chimes for the intercom system that can sound the doorbell in any room, new accessories for food centers, new low cost

from kitchen cabinets, new oven hoods to vent smoke from open broilers. The new shallow range hoods mount the fan Chambers Built-Ins' new undercount-

range hoods that do not take space

in the hood, vent through the wall or between the studs to the roof.

NuTone, Cincinnati.
For details, check No. 16 on coupon, p 236

Admiral's 1959 line includes ten new refrigerators, in sizes from 8.6 to 15.8 cu ft, prices from \$269.95 to \$649.95. Units are made in modular widths (24", 28", 32") to fit standard cabinet depths. Top line "Dual-Temp" models are self-defrosting; Auto-Defrost models clear both refrigerator and freezer in 10 minutes. Shelves and storage compartments have been redesigned to permit more efficient storage. Dual-Temp and Auto-Defrost models have no exterior coils, fit flush to rear wall.

Admiral Corp, Chicago.
For details, check No. 17 on coupon, p 236

chambers Built-Ins' new undercounter dishwasher superheats the wash water, then heats the drying air to 200F for sterilizing and quick drying. The cycle can be interrupted at any point, uses only 6.3 gallons of water. A new built-in refrigerator gets 17 cu ft of storage in a 36" width including 6.5 cu ft of freezing. Unit is 3'x7'x2', finished in stainless steel, copper or prime coated. Chambers new continuous-feed disposer has 15% more power, is guaranteed for one year.

Chambers Built-Ins, Chicago.
For details, check No. 18 on coupon, p 236

In-Sink-Erator has a new top-line Model 27 that gives both continuous-feed and lock-cover operation, controlled by one cover. It is a ½-hp automatic-reversing model that runs in either direction, reverses automatically.

In-Sink-Erator Mfg, Racine, Wis. For details, check No. 19 on coupon, p 236

Trade-Wind's new hoods do not take up storage space, have 3-speed blowers, twin filters, two 75-w lamps, finger tip controls. 30", 36", 42", 48" sizes.

Trade-Wind, Pico Rivera, Calif. For details, check No. 20 on coupon, p 236



Caloric appliances—built-in and freestanding gas ranges, single- and doublebowl sinks, and new ventilating hoods—are now available in coordinated colors. Double blower has a built-in filter and two glare-free lamps light range top. Hoods come in 30", 36", and 42" sizes.

Caloric, Topton, Pa.
For details, check No. 21 on coupon, p 236



New Youngstown kitchens combine the looks of wood with the dimensional stability of steel. Pictured above is sandalwood, a color chosen to blend well with any color scheme. Also new, but not shown, 44" cabinet doors, which will carry the cabinet front to the normal ceiling height.

Youngstown Kitchens, Warren, Ohio. For details, check No. 22 on coupon, p 236



New Bilt-Well kitchens from Caradco have clean modern lines with moulded vertical edges that are easy to clean. Cabinets have birch fronts; drawer fronts are dovetailed to the sides; most other joints are t&g. Specs call for 5-ply laminated fronts, clear ponderosa pine bodies and shelves.

Caradco Inc, Dubuque, Iowa. For details, check No. 23 on coupon, p 236 Speed Queen's new units have a "flip-top" lid that makes these washers and dryers exceptionally easy to service. All that's necessary is to take out two bolts on the control panel top, lift the entire top up and over. The front panel can also be removed. These features should save lots of time and expense in callbacks.

Speed Queen, Ripon, Wis.
For details, check No. 24 on coupon, p 236

Roper ranges include a new kitchenheater model under both the Roper and Florence brand names. These come in 36" and 40" models, use porcelain enameled steel heat exchangers in the heater section which is thermostat controlled. The range portion has an automatic top burner, automatic oven, and smokeless broiler.

Geo D. Roper Sales, Kankakee, Ill. For details, check No. 25 on coupon, p 236

Philco's gas dryer has a new thermostat that shuts off the unit when water in the clothes reaches 5%. Gas input is 24,000 Btuh for the dryer; the pilot draws 450 Btuh. Regular operating temperature is 150F to 155F, the right heat for dewrinkling synthetic fabrics. A mixed 18 lb load will dry in 30 minutes. Suggested price: \$329.95.

Philco Corp, Philadelphia.

For details, check No. 26 on coupon, p 236

Built-in two-level oven is new from Thermador. Upper oven is automatic controlled, full sized, glass doored. Lower 12" unit is also thermostat controlled, has exclusive broil shield to prevent spattering when door is left ajar. Unit fits standard 24" cabinets, comes in stainless steel, copper, blue, yellow, pink, and white.

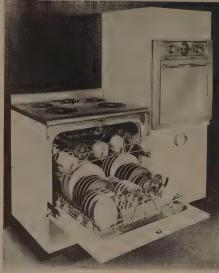
Thermador, Los Angeles.
For details, check No. 27 on coupon, p 236



Lyon Disposo-Well sinks are specially designed for use with waste disposers, have an 8" drain funnel directly under the faucet. Removable cutting board fits sink compartment so scraps from food preparation can be scraped right into disposer. New this year is a single bowl version.

Lyon Stainless Prods, Detroit.

For details, check No. 28 on coupon, p 236



Tappan and Youngstown produce this 54" wide dishwasher-cooking unit. Youngstown's dishwasher is topped with Tappan's burner unit; Tappan's electric oven is in a Youngstown cabinet. Price: less than \$600.

Youngstown Kitchens, Warren, Ohio. For details, check No. 29 on coupon, p 236



Top-line Frigidaires now have frost-free operation in the freezing compartment as well as the refrigerator. Frozen food packages will not stick together. 12.4 cu ft unit includes 90-lb freezer.

Frigidaire, Dayton.
For details, check No. 31 on coupon, p 236



Easy Combomatic puts both washing and drying under the counter in one appliance. It's a big 10-lb unit only 27" wide. No venting is required: both washer and dryer have lint traps and moisture is removed through the drain by condensation. Unit mounts on slide rails, pulls out for servicing.

Easy Laundry Appliances, Chicago. For details, check No. 33 on coupon, p 236



Deluxe 40" range is new with Tappan. The high decorative backsplash holds a full-width fluorescent tube, the control center, and a guide to cooking times, conceals the oven vent. Oven is completely automatic.

Tappan Co, Mansfield, Ohio.
For details, check No. 30 on coupon, p 236



Hotpoint's RB-602 range has a 23" wide oven, automatic rotisserie, divided surface units, automatic meal timer, automatic oven control, dripless recessed top, 2,600-w high-speed surface unit.

Hotpoint, Chicago.
For details, check No. 32 on coupon, p 236



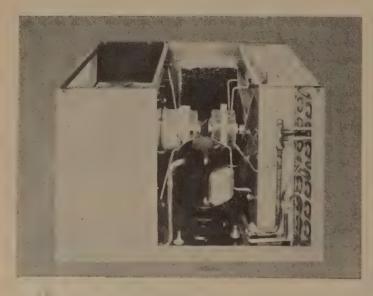
General Electric laundry combines a washer with a choice of five wash cycles and a matching dryer to handle all fabrics. The washer can vary speed, wash water temperature, rinse temperture, spin speed, and time. The dryer varies time and temperature, also has dewrinkling setting.

General Electric, Louisville.

For details, check No. 34 on coupon, p 236

AIR CONDITIONING

Air conditioning will make big news in 1959. This is the big new area of development in mechanical services, particularly in the development of central systems. Heat pumps are booming wherever climates are moderate and electric rates low. Where bigger heating loads are common, stack-on cooling is being incorporated into forced-air systems, some places for well below \$1,000. And more and more custom installations are calling for full air-conditioning: heating, cooling, humidifying, dehumidifying, and full air cleaning with electrostatic filters (see page 131 and H&H, Aug. '58).



Carrier introduces a 2-hp heat pump

Designed to meet the market for a smaller year-round heat-pump system, for single homes or multi-unit installations, the Carrier 64C2 Weathermaker has integral cooling capacity of 22,000 Btuh and heating output of 23,000 Btuh. Additional radiant strip heaters can be added in 10,200 Btuh units. The new unit will defrost automatically every 90 minutes if prevailing temperatures are below the frost point. Unit is 35"x30¼"x21½", weighs 320 lb.

Carrier Corp, Syracuse.

For details, check No. 35 on coupon, p 236



York heat pump works at zero or 115F

The York HP36 model has two separate sealed compressor-expander systems plus a two-stage supplementary heater. These, plus staggered tubes and rippled fins, are claimed to extend service beyond the usual heat-pump operating range. The unit will cool at 36,000 Btuh rate, will heat at 48,100 Btuh at zero to 73,600 Btuh at 60F. The indoor section can be rotated 180° so unit can work vertically or horizontally. Overall size: 29-9/16"x46"x52"; weight: 565 lb.

York Corp, York, Pa.

For details, check No. 36 on coupon, p 236

Typhoon heat pumps are made in airto-air units to 120,000 Btuh cooling and 134,000 Btuh heating capacity, water-to-water units to 596,000 and 731,000 Btuh capacity. Typhoon claims its Prop-R-Temp household size unit will deliver 9740 Btu per 1ϕ with $1\frac{1}{2}\phi$ per kwh electricity. This unit uses no supplementary heating, is automatically defrosted. The smallest unit is claimed to give over 20,000 Btuh even at -20F.

Typhoon Heat Pump Co, Tampa.

For details, check No. 37 on coupon, p 236

Dunham-Bush chillers, baseboards, cabinets, and between-stud wall units make a complete hydronic cooling system, or with a wet-heat furnace can form a year-round hydronic air conditioning system. Compressors come in 2-3-5- and 7½-hp models with innerfin condensers, chillers, super-heaters, etc.

Dunham-Bush, West Hartford, Conn. For details, check No. 40 on coupon, p 236

Gaffers & Sattler have added a 3-hp unit air conditioner with a 40,000 Btuh cooling capacity to their line for attic, crawl space, or gable installation. Condenser fan is 5-blade 20" propeller for high cfm delivery. Expander blower is a double squirrel cage driven by a separate ½-hp motor. The compressor section is hermetically sealed. The cabinet is lined with insulation to cut down sound transmission.

Utility Appliance, Los Angeles.
For details, check No. 38 on coupon, p 236

Luxaire add-on units in 2-, 3-, and 5-hp sizes have just been announced by C. A. Olsen. These are split systems with new, more compact, circular cooling coils for plenum installations, flat coils for duct installation. The new condensers have centrifugal blowers, top exhaust, and oversize coils and motor-compressor units.

C. A. Olsen Mfg, Elyria, Ohio. For details, check No. 41 on coupon, p 236

New from Chrysler for '59 are two 140,000 Btuh furnaces and two new cooling sections—one 2-hp, one 5-hp—for central systems; a new line of room units, and a new electrostatic filter (see p 131). 1959 room units take up one-third less space, have a new humidity control system. The new heating, cooling, and filtering systems round out a full line of residential air conditioning from Airtemp.

Chrysler Corp, Dayton.
For details, check No. 39 on coupon, p 236

Williamson's new Condaire central cooler can be mounted entirely indoors; it has a separate blower for cooled air and for condensing. Exhaust ducts can carry the warmed air out of the house. Seal-Tite connections for supply and return lines do not transmit vibrations. Now available in 2- and 3-ton models, with bigger ones to come.

Williamson Co, Cincinnati.

For details, check No. 42 on coupon, p 236

Complete system for \$769 uninstalled is offered by Cobell Industries in Rangaire 33. The components: a 33,500 Btuh cooling unit, a 100,000 Btuh gas-fired furnace and all controls. System would use a 34"x32½"x23¾" outside compressor and a closet-sized (18¾"x27") furnace complete with the evaporator coil all covered by a 5-year guarantee. The makers claim exceptionally quiet operation. Other Rangaire residential air cooling systems have capacities that range from two to ten tons, from 24,400 to 131,500 Btuh.

Cobell Industries, Cleburne, Tex.
For details, check No. 43 on coupon, p 236

Electromode duct heaters convert central air cooling systems into year-round air conditioning systems. Two units—one 3 kw, one 5 kw—are made for minimum cfm of 200 and 325. Air is warmed by passing over a finned aluminum casting enclosing tubular resistance heaters. Finned element is 11" deep, fits a 2-1/16"x105%" hole in the duct. A safety switch shuts off heater if airflow falls below minima and coils are in danger of overheating.

Electromode, Rochester, N.Y.
For details, check No. 44 on coupon, p 236

Moncrief blower-coil units, rated at net cooling capacities of 34,000 and 55,300 Btuh, are new from Henry Furnace Co. The units combine flat evaporator coils and a large squirrel-cage blower that can be installed in ductwork when combined with a warm-air system or, with accessory intake and exhaust plenums, work directly in open areas.

Henry Furnace Co, Medina, Ohio. For details, check No. 45 on coupon, p 236

New Curtis split systems are air cooled for residential use, handle 30,000 to 90,000 Btuh capacities. All-weather cabinets shield semi-hermetic compressors. Blowers are large capacity, slow speed centrifugal type. Condensers may be used with bonnet, duct, or remote evaporating coils.

Curtis Mfg Co, St Louis.

For details, check No. 46 on coupon, p 236

Ilg cabinet units for year-round use with chilled or hot water handle 200 to 1,400 cfm, have cooling capacities of one to five tons, heating capacities of 25,000 to 100,000 Btuh. Units may be freestanding, recessed or semi-recessed.

Ilg Electric Ventilating, Chicago.
For details, check No. 47 on coupon, p 236

Chiller coils for central or zoned systems are made by Halstead & Mitchell in heights to 12" to 36", lengths of 24" to 120", one to light rows deep. Coils are seamless copper, in-line or staggered.

Halstead & Mitchell, Pittsburgh.

For details, check No. 48 on coupon, p 236



Lennox shows wide range of complete systems

Stack-on units like those above come in four widths with a total of 18 oil and gas heating units, four cooling units, three heat pumps, two sections for resistance strip heaters. They can be combined in a variety of upflow, downflow, or basement models in ducted and ductless versions. New blower drive

rides on cradle to reduce noise, hold belt tension; new hammock filters wrap around blower for better edge seal, fuller exposure; bigger cabinets are fiberglass lined for greater quiet.

Lennox Industries, Marshalltown, Iowa.

For details, check No. 49 on coupon, p 236



Mathes heat pumps come in remote or central models. Central models cover the 24,000 to 56,000 Btuh range, remote systems go up to 230,000 Btuh. Automatic controls reverse cycle under thermostat control to give you the temperature you want winter or summer. Supplementary resistance heaters are available where needed.

Mathes Co, Fort Worth.

For details, check No. 50 on coupon, p 236



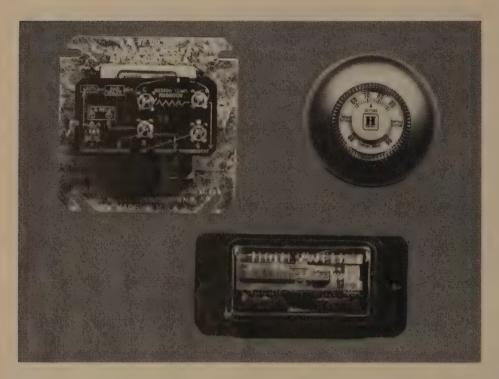
Windmaker eave vent fan is an air conditioning accessory designed to reduce attic heat and lower the load on cooling systems. Fan is located in the soffit, under the eaves, blows air through attic spaces and out through attic louvers or eave vents. Two models—20"x20" and 24"x24"—are available to move 1700 and 2400 cfm.

Phil Rich Fan Mfg Co, Houston.

For details, check No. 51 on coupon, p 236

HEATING ACCESSORIES

Air conditioning also means more and better controls—controls that raise or lower house temperatures, winter or summer, to match the change in the weather. And to supplement central-system air conditioning, more and more gas and electric in-the-wall or in-the-ceiling heaters are being offered, some of them big enough to take on the whole job for a guest house or summer cottage. Also packaged baseboards that tie into the wiring system, useful as original or supplementary heat, are in units that need only be nailed to studs and snapped together to install.



Here's an indoor-outdoor thermostat

Honeywell's new controls adjust indoor temperatures to balance changes in outdoor temperatures. The outdoor sensing element measures the effects of sun, wind, and temperature, signals indoor unit to change its setting. A single outdoor unit can compensate up to four indoor stations for heating and air con-

Penn Rimset thermostat will handle heating, cooling, or year-round air conditioning when combined with the right sub-base. If cooling is added to a heating system, the sub-base can be changed inexpensively. The bimetallic system, dial, and contacts are in the thermostat section; variables are in the sub-base.

Penn Controls, Goshen, Ind.
For details, check No. 69 on coupon, p 236

Back-to-back wall heaters generating 50,000 Btuh, heat two rooms at once, can be controlled from either room. Recessed units are gas-fired, offer four options in control systems. Single Brilliant Fire unit generates 25,000 Btuh.

Ohio Foundry & Mfg, Steubenville. For details, check No. 71 on coupon, p 236

ditioning. Reset ratios of indoor units can be adjusted to suit house or owner. With Honeywell's Indoor Electric Clock Thermostat, cost installed is about \$100, with Indoor Round Thermostat (above), about \$50.

Minneapolis-Honeywell, Minneapolis. For details, check No. 68 on coupon, p 236

Infra-Safe heater uses a quartz tube resistor backed by a polished chromium reflector. The unit is shockproof and moistureproof, produces infrared rays without ultraviolet rays. The unit weighs only 7 lb, is surface mounted, lists at \$29,95.

Engelhard Industries, Newark.
For details, check No. 70 on coupon, p 236

Chromalox' new wall heater is a forced-air electric unit that is only 12"x14" overall, projects only ½". Available for 120-v or 240-v at 750-w and 1,500-w. Built-in thermostat is combined with on-off switch. Grille and frame are chrome plated.

Edwin L. Wiegand Co, Pittsburgh. For details, check No. 72 on coupon, p 236

New Thermoramic control regulates indoor temperature by means of an outdoor sensing unit, so heating system puts out more heat as outside temperature falls, cuts down as outdoor ambient rises. Thermoramic compensator can be teamed with a variety of General Controls' indoor thermostats for winter or year-round systems.

General Controls, Glendale, Calif. For details, check No. 73 on coupon, p 236

Control for electric heat is newest thermostat in White-Rodgers line. The deluxe Series 1A65 has its sensing element in the exposed knob so that it reads both ambient and radiant heat. Heat range can be set from 55F to 85F or on "cold" for system shut-off. The 4¾"x2½" unit fits any standard 2"x3" conduit box, is rated at 2,500-w, 120-v or 5,000-w, 240-v.

White-Rodgers Co, St Louis.
For details, check No. 74 on coupon, p 236

lonix wall convectors use a glowing ceramic and coil to circulate heat and, the maker claims, to destroy airborne bacteria, mold spores, and pollen. Units range from 1,500-w to 8,000-w, are 201/4" high, 9%" to 541/4" long.

Wesix Elec Heater, San Francisco.. For details, check No. 75 on coupon, p 236



Thermador wall heaters are now fitted with thermostat or time controls. Time controlled RBT-101 is a 1,000-w, 120-v unit that shuts off after any predetermined time up to 30 minutes, developed for motel use. RBA models—all 120-v — are 1,000-w, 1,250-w, and 1,500-w and have a built-in thermostat. Priced retail between \$20 and \$25.

Thermador, Los Angeles.
For details, check No. 76 on coupon, p 236

Dual-Fin baseboards come in 750-w, 1,500-w, 2,000-w capacities in 36", 72", 96" lengths. The heating element is aluminized steel with galvanized baffles, can be installed either side up. Wallmount or built-in thermostats are available

Electrovector, Inc, Brooklyn.
For details, check No. 77 on coupon, p 236

Ventrola 3-way unit combines a 1,475-w heating element, a squirrel cage vent blower, and two incandescent lamps. Vent discharges through a regular 4" round duct, built-in damper prevents backdrafts. Motor, fan, and heating element can be removed as one unit. Waterproof motor carries a 5-year guarantee. Suggested retail price is \$64.95.

Ventrola Mfg Co, Owosso, Mich. For details, check No. 78 on coupon, p 236

Hotpoint baseboard units use Calrod elements to give low-density heat. No forced convection is needed so there is no heat blast, no dust stirred up. Heating panels come 4' long, 500-w, or 6' long, 750-w. Blank panels, joining strips, corners, caps, 115-v outlets, and thermostat complete system. Stock finish is gray baked enamel.

Hotpoint, Chicago.
For details, check No. 79 on coupon, p 236

Berns Air King has four new bathroom heaters: a triple combination of fan, light, and ribbon element heater that delivers instant heat—\$65; the same unit without the fan—\$49.95; a recessed ceiling heater with ribbon elements; and a budget surface-mounted heater with the instant elements, at \$18.90. Fan, light, and heater combinations have separate switches for each function.

Berns Air King Corp, Chicago. For details, check No. 82 on coupon, p 236



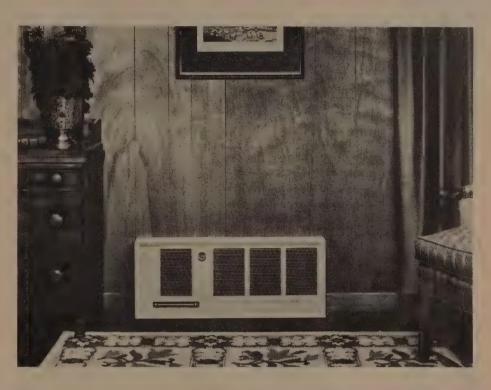
Berko ceiling heaters use 1000-w Pyrex radiant glass panels, 200-w of lighting. Heating can be controlled by a wall thermostat, light by a wall switch. A small fan assists the heating. Unit is 13"x27" outside, 12"x26"x6¾" inside. Finish is polished chrome or baked white enamel. 120, 208, or 240 volts. UL approved.

Berko Mfg, Queens Village, N.Y. For details, check No. 84 on coupon, p 236

Ilg baseboard heaters come in 2'-, 5'-, and 8'-long radiant panels that can be installed in three steps: the back panel, which holds the heating element, is nailed to the studs; power is connected to a standard splice box; covers, end caps, and cornerpieces are snapped on. Panels are bonderize primed, UL approved. Also new, a line of built-in wall heaters to cover the range of 6,800 to 14,000 Btuh.

Ilg Electric Ventilating, Chicago. For details, check No. 80 on coupon, p 236 Hot-water baseboard from International needs no plumbing—freeze-proofed water is enclosed in a finned convector, heated by an electric immersion element. From this, the maker claims cleaner, more even heat. Units are 10" high, 31/4" deep, in lengths of 491/2", 611/2", 855/8", 11111/2" that put out 2,550, 3,400, 5,100, 6,800 Btuh. Similar units are also available as portable units for plug-in operation.

International Oil Burner, St Louis.
For details, check No. 81 on coupon, p 236

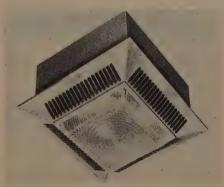


Wall heaters give zoned heat

Forced-air baseboard heaters from R&M-Hunter come in 1,000-w, 1,500-w, 2,000-w, and 5,000-w models. All call for 240-v current. A low-speed blower draws room air in through single left louvers, blows it over thermostat-con-

trolled radiant elements and out through three right louvers. Unit is 13" tall, 33" long, 3%" deep. Safety switch cuts power when grille is removed.

R&M-Hunter, Memphis.
For details, check No. 83 on coupon, p 236



Broan's new ceiling heater puts out 1,500-w of fan-directed heat downward over a wide area. It also supplies light from two 60-w lamps through an 8½" square prismatic lens. The grille is stainless steel. The unit is 11½" square and shallow enough to fit a 6" ceiling. UL approved with five-year guarantee. Lists at \$49.

Broan Mfg Co, Hartford, Wis. For details, check No. 85 on coupon, p 236



Emerson-Pryne People Heater gives instant heat from three standard 250-w heat lamps, light from three 60-w incandescent bulbs. Unit is surface-mounted to standard outlet box in 15 minutes, maker claims. Bowl is fiberglass diffuser, 5½" below ceiling. Total depth is 10" below ceiling. Retail list: \$29.95 less lamps.

Emerson-Pryne, Pomona, Calif. For details, check No. 86 on coupon, p 236

FINISHES

INTERIOR Making news in interiors are two old materials and two new ones: 1) Wood paneling has become one of the most economical ways to finish an interior. Here (and in H&H, Oct '58) you will find new finishes, new woods, new ways to install the panels. 2) Ceramic tile now combines new designs and new laying techniques for durability and easy maintenance. 3) Vinyl plastics in reinforced sheets make walls that are impregnable to practically everything. 4) And a new liquid "tile" gives a ceramic-like finish to almost every known building material.



Scoring gives small scale to large tile

American Olean has now 41/4"x41/4" tile scored so each tile looks like three, four, or nine smaller tile. The score lines fill with grout when the tile is laid to complete the illusion. These tile are available in 13 new crystalline glazes,

but only one color is possible per tile. The same new glazes are available on the company's standard unscored wall and trim tile.

American Olean, Lansdale, Pa. For details, check No. 87 on coupon, p 236

Inlaid plastic tile leads Miraplas Tile Co's new line. These tile have solid color inlays that extend all through the tile. They are available in a wide range of designs and subtle colors. Also new from Miraplas: a line of bathroom accessories to match the tile.

Miraplas Tile Co, Columbus. For details, check No. 88 on coupon, p 236

Hammered metal tile is the latest wall covering from Vikon. They come in solid copper, stainless steel, brushed aluminum, or copper-glazed aluminum. Tiles are 41/4"x41/4", retail for \$2 a sq ft in copper or stainless, \$1.20 for enameled aluminum.

Vikon Tile Corp, Washington, N.J. For details, check No. 89 on coupon, p 236 New low-price panels with a patented finish are being shown by General Plywood. Woods include: walnut, cherry, oriental ash, sliced white oak, ribboncut and rotary-cut Philippine mahogany, birch, and sliced red oak. Only finish necessary on-site is waxing and

General Plywood, Louisville. For details, check No. 90 on coupon, p 236

Weyerhaeuser's Loc-Wall is a new system of slip-together wood paneling. Matched planks are factory-nailed into 32" panels with interlocking furring strips. Strips on one side slip under adjoining panel, then far side strips are nailed to studs. There is no face nailing. Woods available: Idaho white pine, ponderosa pine, red cedar, larch.

Weyerhaeuser Sales Co. St Paul. For details, check No. 91 on coupon, p 236

Irish linen is the latest pattern in Bolta-Wall, General Tire's vinyl wall covering. The new pattern comes in eight pastel colors, 50" wide, in 25-yd rolls. The material is fire-, water-, acid-, alkali-resistant, also resistant to most solvents and foodstuffs.

General Tire & Rubber, Akron. For details, check No. 92 on coupon, p 236

Tile from Japan is being sold by Apsco in 1'-square fabric-backed mosaics. Tiles come in 3/8" squares or 5/16"x1 1/16" oblongs, in mixed shades of ten colors or in random patterns. Priced at about \$1.40 per sq ft for square tiles and \$1.50 for oblong.

Apsco, Fort Wayne. For details, check No. 93 on coupon, p 236

Pomona Tile has a new Fishnet pattern, designed by Dong Kingman, in its Distinguished Designer Series. Earlier contributors to the series have included: Paul McCobb, Millard Sheets, Dorothy Liebes, Saul Bass, and Paul Laszlo. Fishnet, like the earlier patterns, is available in 41/4"x41/4" modules in satin or Perma-Glaze finish.

Pomona Tile, Los Angeles. For details, check No. 94 on coupon, p 236



Masonite Panelok has built-in racks

The hardware that joins these new panels also serves to hold a variety of racks, shelves, pictures, etc. The panels are factory-grained hardboard which lock together with a perforated spline that also serves to anchor the accessories. Also new from Masonite: Royalcote walnut-grained hardboard panels in four new color tones.

Masonite Corp, Chicago.

For details, check No. 95 on coupon, p 236

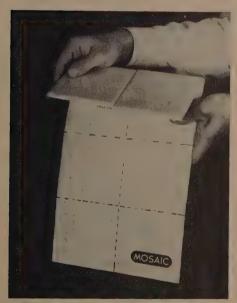


US Plywood adds new "Charter" panels

Birdseyes, pin curls, and grain variations in the wood distinguish USP's Charter line. It now includes Charter Oak (above), Charter walnut, Charter birch, and Charter pine, in fine furniture finishes, for 55ϕ to 60ϕ a sq ft. Also new: Tapistron—a coated vinyl wall fabric in 11 textures and 14 colors at slightly lower cost than other USP vinyls.

US Plywood, New York City.

For details, check No. 96 on coupon, p 236



Mosaic Tile now mounts its 41/4"x41/4" glazed tile in groups of eight on a sheet of strong latex-impregnated paper. Swif-Way mounting has large perforations so 51% of the tile will bond securely to the setting bed. The paper also bonds firmly to standard setting materials, either conventional or thin-set; it is also claimed to require less adhesive in the setting bed. Eight-tile groups were chosen as the optimum unit for easy handling by the tilesetter.

Mosaic Tile Co, Zanesville, Ohio.

For details, check No. 99 on coupon, p 236

Keller mouldings are now made to match any plastic laminate on the market. Plastics, veneers, vinyls, wood veneers, and other surfacing materials are bonded to aluminum extrusions. Matched mouldings cut the work of scribing and butting joints and eliminate edge buckling and curving.

Keller Prods, Manchester, N.H.
For details, check No. 97 on coupon, p 236

PlyWelsh mouldings can now be bought to match any plywood on the market, regardless of maker. Stock mouldings come in nine shapes and eight finishes, are automatically sanded, burnished, toned filled, sealed, plastic coated, and baked. Mouldings are shipped in sealed polyethylene bags.

Welsh Plywood Corp, Memphis.
For details, check No. 98 on coupon, p 236

Mozel "Tile" coating gives a tile-like finish to any building material: concrete block, brick, wood, asphalt, asbestos, metals, etc. Sprayed on, it covers 200 to 250 sq ft per gallon, gives a satin, dull, or glossy finish that is claimed to be maintenance free, fire resistant, fadeproof, frostproof, chalkproof, resistant to shock and salt water. A wide color choice is offered.

Quartz Mosaic Inc, Yorklyn, Del. For details, check No. 100 on coupon, p 236

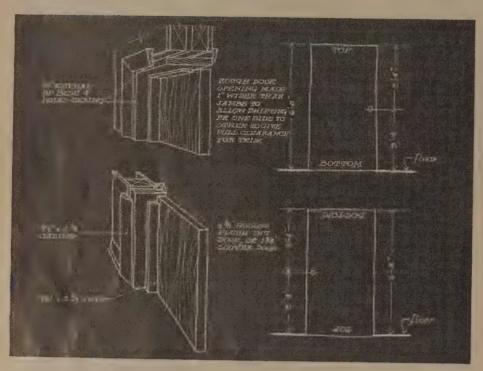


Barclite panels enliven kitchen cabinets in this new application. These reinforced plastic sheets for use in shojis, room dividers, shower stalls, etc, are available in new hemp and gold thread patterns plus a wide range of natural materials. Above is "Autumn Wood," a pattern using butterflies and foliage in reinforced polyester. Barclay also makes plastic overlaid hardboard panels in a wide variety of colors and in standard sheet sizes as wall covering for kitchens and baths.

Barclay Mfg Co, New York City. For details, check No. 101 on coupon, p 236

DOORS

The big news in doors comes from the precut and prehung industries: at the left below, Pease Woodwork shows how their doors can be flopped top to bottom, hand to hand, without changing hardware. At the right, Ready Hung Door Corp shows how a major design change has eliminated two annoying problems in door hanging. Also very new and very important, floor-to-ceiling doors and surface-mounted doors (see page 129). Bi-fold and by-pass door makers, who are getting more and more of the interior door business, also have new and better ways to use their product.



This door can be hung right or left handed

Pease's new door makes it unnecessary to stock both hands of interior doors. The two-knuckle half of the hinge is factory-attached, the three-knuckle half can be field applied to either jamb. Boring for knob-latch is halfway up the

Wood Modernfold door with 6" wide

vertical panels is new this year. The

panels have a particle-board core faced

with walnut, mahogany, oak, or birch

veneer. Nylon trolleys carry the door

in a steel headtrack-no floor track is

required. Vinyl and steel hinges join

For details, check No. 104 on coupon, p 236

New Castle Prods, New Castle, Ind.

the panels. Factory finished.

door. All hardware is included; the frame is shipped knocked-down, with or without trim. Jambs for ½" drywall or ½" plaster are available.

Pease Woodwork, Hamilton, Ohio. For details, check No. 102 on coupon, p 236

Pella folding doors in two new woods—white ash and walnut—have been added to the present line. As with all Pella doors, spring hinging is concealed and the appearance of an all-wood door is maintained from every angle. Also available: birch, oak, pine, and Philippine mahogany.

Rolscreen Co, Pella, Iowa.

For details, check No. 105 on coupon, p 236

Electronic door operator by F. C. Russell stops the door automatically if it meets resistance on its way up or down. The unit requires no headroom. Door warping is minimized because unit lifts door on both sides. An automatic timer turns lights on and off. Operator works from dash of car or push button in the house or garage.

F. C. Russell, Columbiana, Ohio. For details, check No. 107 on coupon, p 236

Sliding mirror doors for closets or as movable partitions are being offered by Fleet of America. Fleetline doors have ½" mirrors mounted on one or both sides of ½" Masonite (or mirror one side, paneling on the other). Mirrors are framed in silver or gold anodized aluminum in by-pass, single-pocket, or double-pocket types.

Fleet of America, Buffalo.
For details, check No. 108 on coupon, p 236



New bifold door by Simpson is shipped pre-assembled in protective carton. Only tool needed for installation is a screwdriver. Two-door units for 2', 2½', and 3' widths; four-door units for 4', 5', and 6' widths available in Douglas fir, lauan, sen, and birch.

Simpson Logging, Seattle.

For details, check No. 103 on coupon, p 236

Metal wardrobe door has reversible tracks at top and bottom. Track has two different edges—a sloped edge for hard surface flooring and a beveled edge for carpeted or tiled floors. Track may be placed so either edge will face the room. Metal doors have flush faces, are shipped painted, with hardware.

Roberts Mfg, City of Industry, Calif. For details, check No. 106 on coupon, p 236

New Calder garage door has one side flush instead of two to reduce weight and cost. It can be supplied plain or with windows or decorative features of any size and shape. New hardware being used by Calder this year reduces headroom required to only 9½".

Calder Mfg Co, Lancaster, Pa.

For details, check No. 109 on coupon, p 236

Alsco storm-screen door is company's newest aluminum product. The 1" thick door is called the Ambassador. It has an adjustable sill sweep of vinyl; all hardware is included in the package. The door comes with evenly divided sash or with a 40"x19" glass area.

Alsco, Akron.

For details, check No. 110 on coupon, p 236

All-steel garage door has six interlocking sections. Taylor's "Instamatic" door features metal V-shaped weather strips attached to interior edges and side jambs. It is factory painted, operates on nylon rollers, and has heavyduty springs. The door is available in all residential sizes and commercial sizes up to 10' in height.

Taylor Made Garage Doors, Detroit. For details, check No. 111 on coupon, p 236

Sectional garage door with 13%" thick sections and plywood panels is Frantz's lowest priced door. Called the "1200" series, the doors are pre-bored and hardware is attached with bolts. Hardware is zinc-plated. Frantz also has a wide variety of sectional and rigid garage doors in many face patterns, and two electric operators.

Frantz Mfg Co, Sterling, Ill. For details, check No. 112 on coupon, p 236

Flush-face garage door has five horizontal sections faced with Masonite set in steel frames. All metal parts are galvanized to prevent rust; frames are treated for paint adherence. The Raynor "Jet" door is available with torsion or extension springs. Wood bottom rail provides for easy scribing and attachment of rubber astragal.

Raynor Mfg Co, Dixon, Ill.
For details, check No. 113 on coupon, p 236

One-piece garage door in Steel Door's lower-price range is new this year. It has nylon rollers, adjustable track hangers, and complete weather stripping. Called the Detroiter, it is guaranteed for five years against warping, swelling, paint peeling, or rusting. Standard sizes range from 7'6"x7' single doors to an 18'x7' double door.

Steel Door Corp, Birmingham, Mich. For details, check No. 114 on coupon, p 236

Complete Crawford line of garage doors includes new hardware packages for builders who install their own doors, as well as two new doors. One new door has one side flush; the other has translucent plastic panels that let enough daylight into the garage so window can be eliminated. The patterned plastic panels are available in three background colors.

Crawford Door Corp, Detroit.

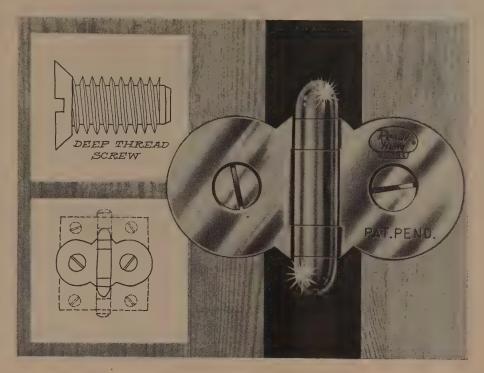
For details, check No. 115 on coupon, p 236

Alliance garage door operator handles both solid and sectional doors. Called the Genie "400," it opens, closes, and locks a garage door at the touch of a button, turns the garage lights on and off. The unit has a ½-hp electric motor that will handle a door up to 8'x20'. Rails and extrusions are of aluminum. In the event of power failure, door can be easily released from the operator.

Alliance Mfg Co, Alliance, Ohio. For details, check No. 116 on coupon, p 236

Insulated garage door with a honeycomb core is new with Barber-Colman this year. The overhead door is 134" thick, with hardboard facings and treated redwood closures. Special closing hardware positions the whole door firmly against the stops to cut air leakage. Barber-Colman also has a moderately-priced door control which opens the garage door from a button on automobile dash.

Barber-Colman, Rockford, Ill.
For details, check No. 117 on coupon, p 236



Ready Hung adopts self-aligning hinge

This new door hinge uses only two screws which are claimed by the maker to have $2\frac{1}{2}$ times the holding power of the six screws in a rectangular hinge. Also, the circular hinges align themselves automatically so that accidental

stresses on the hinge pin are eliminated. Shorter pins add to the appearance of the company's doors. These hinges are exclusive to Ready Hung.

Ready Hung Door Corp, Fort Worth. For details, check No. 118 on coupon, p 236

Sliding glass doors

H&H will have a complete round-up of sliding glass doors in March. Meanwhile, here is a list of manufacturers that have already told us they have new products. (For details, check the number on the coupon, p 236.)

Ador Sales, Fullerton, Calif./D1
Arcadia Metal, Fullerton, Calif./D2
Capitol, Mechanicsburg, Pa./D3
Daryl Products Corp, Miami/D4
Devac, Inc, Minneapolis/D5
Fleet of America, Buffalo/D6
General Bronze, Garden City, N.Y./D7
Glamour Glass Wall-Dor, Chicago/D8
Lynart, Inc, Los Angeles/D9
Nudor Mfg, North Hollywood/D10
Peterson Window, Ferndale, Mich./D11
F. C. Russell Co, Cleveland/D12
Slide View Door, El Monte, Calif./D13
Sun Valley Ind, Sun Valley, Calif./D14
T. V. Walker, Burbank, Calif./D15

Kewanee steel door frame can be quickly installed by a carpenter. The frame installs over drywall and is available for swing doors or sliding wardrobe doors. Sanding or nailhole filling is not required. Rubber bumpers on jamb cushion closing door. Frame is galvanized steel, for any thickness of drywall, all common door sizes.

Kewanee Mfg Co, Kewanee, Ill. For details, check No. 119 on coupon, p 236

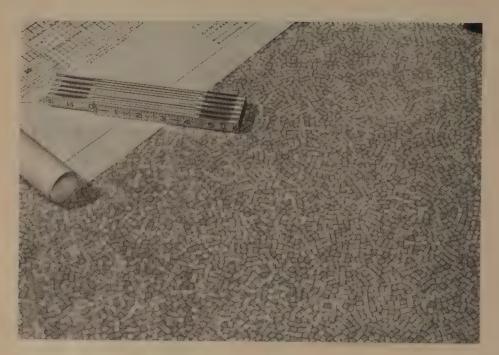
Garage door opener combines operator and radio receiver in a unit the size of a portable radio. The unit is installed on the header beam above the garage door—only three lag screws are required. Radio control unit is operated from car dashboard. Approved by UL and the FCC the opener is insensitive to stray signals from ham operators or aircraft.

Paxton Prods, Santa Monica, Calif. For details, check No. 120 on coupon, p 236

continued on p 166

FLOORING

No part of the house is developing faster—in wood, in plastic, in ceramics. In wood the news is price: thin mosaics, blocks, and tiles can now be laid in mastic on a dry slab for 35ϕ to 50ϕ a sq ft. In resilients, the news is quality: new translucent vinyls and new patterns are fine flooring in their own right, combining the look of marble, terrazzo, or mosaic with the comfort of rubber. In ceramics, the news is style: designers are turning out new shapes, colors, and textures in the most durable and easily maintained floor of all.



New patterns from Azrock include grained designs in pastel tones. These tiles are vinyl, 9"x9", 1/16" thick. Also new are "Carpet Tones" in Azrock's asphalt tile line. Four colors in flecked patterns resembling carpeting are now available. These new patterns have been market tested. Asphalt tile are 9"x9" and ½" thick.

Uvalde Rock Asphalt, San Antonio. For details, check No. 126 on coupon, p 236

Bonafide Mills' vinyl tile has multicolored designs etched in opal effects with gold metallic highlights. Bonny Maid Renoir tile comes in 16 patterns and companion colors. It is available in both .080" and ½" gauge. The Renoir line is going into distribution at the beginning of the year.

Bonafide Mills, New York City. For details, check No. 127 on coupon, p 236

Latest vinyl sheet copies old Italian style

Armstrong's Tessera—the new flooring above—is made of tone-on-tone vinyl chips imbedded in a vinyl grout on Hydrocord moistureproof backing. The slightly embossed surface does not show scratches or subfloor irregularities. Seven color combinations are available.

Kentile's Crystalite Glitter is metal-flecked vinyl, ½" gauge, in 9"x9", 12"x12", 9"x18", 18"x18", 24"x36" 36"x36", and 37"x37". These same sizes are available in marbleized Crystalite. In Kentile's Metallic Chip series (solid vinyl, .080 ga, 9"x9") five new colors are available. Also new: eight rubber, 19 vinyl asbestos colors.

Kentile, Brooklyn.
For details, check No. 122 on coupon, p 236

Dodge Cork has five new patterns in Vinyl-Cork. Seville is large pieces of natural cork on cork composition base. Three different color combinations are available. Desertone tile has gold chips mixed with cork, Emeraldtone mixes iridescent green chips with cork. All have a laminated Velon surface.

Dodge Cork Co, Lancaster, Pa. For details, check No. 124 on coupon, p 236

Tessera is .090" thick, comes in sheets 6' wide. Also new from Armstrong: vinyl sheet and tile with metallic accents; ripple-finished standard gauge linoleum.

Armstrong Cork Co, Lancaster, Pa. For details, check No. 121 on coupon, p 236

Matico marbleized tile comes in 18 new colors. This tile comes in ½" and .080" gauge. Matico is also adding a new color every month to their vinylasbestos line. The company also has a complete line of asphalt and rubber flooring, plastic wall tile.

Mastic Tile Corp, Newburgh, N.Y. For details, check No. 123 on coupon, p 236

6'-wide sheet vinyl is a new product of Pabco. A new vinyl formula is said to help it resist scratching and subfloor "showthrough," and be less slippery than earlier vinyl floorings. Because it is more flexible, Pabco says it can be laid more easily. The new "Vyron" comes in casual and classic styles in a total of eight patterns, is made in standard gauge on felt backing.

Fibreboard Paper, San Francisco. For details, check No. 125 on coupon, p 236



Translucent vinyl gives General Tire's new Cirrus pattern a three-dimensional look. It is made in ½" and .080" gauge, 9"x9" and 12"x12" tiles, and in nine basic color tones plus two metallics. Also available in Bolta-Floor: solids, terrazzo, marbleized, and custom-cut vinyl; Tuflex rubber tile. All in standard or custom sizes.

General Tire & Rubber, Akron. For details, check No. 128 on coupon, p 236 Nailless strip flooring has been under test by Horner Flooring Co since early in 1958. The maple flooring is made up in panels four boards wide, 4' or 8' long, in either 25/32" or 33/32" thickness. Screeds fasten directly to the subfloor. Particle board or asphalt treated cork fills between screeds.

Horner Flooring, Dollar Bay, Mich. For details, check No. 129 on coupon, p 236

Bondwood flooring is made up in 19"x19" units from 43/4"x43/4" parquet blocks, 5/16" thick. Units are laid in mastic, can be bonded to any clean, dry, level floor including concrete slabs. Blocks may be had in three grades and in several hardwoods including oak, walnut, maple, and cherry.

Harris Mfg Co, Johnson City, Tenn. For details, check No. 130 on coupon, p 236

New DuPont floor is foam rubber with a patterned vinyl surface, claimed to wear six times longer than wool, twice as long as rubber tile. Fabric reinforcement will hold tacks and resist tearing. It can be vacuumed, swept, wiped, or washed clean.

DuPont, Wilmington, Del.
For details, check No. 131 on coupon, p 236

Summitville quarry tile has random surface indentations glazed in various colors. Cobbletex has the heavy-duty features of ordinary quarry tile, color possibilities of glazed tile, and a non-skid surface. Six quarry-tile colors in combination with white are available with blue, green, or yellow indentations. Tile is 6"x6"x½" with matching trim.

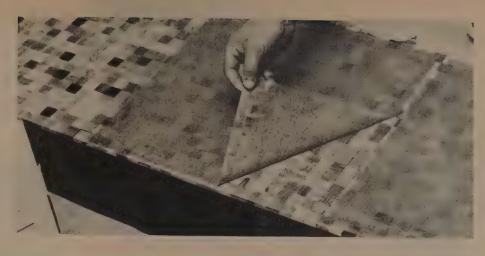
Summitville Tiles, Summitville, Ohio. For details, check No. 132 on coupon, p 236

Congoleum-Nairn's 1959 line will be headed by Brushwood vinyl-asbestos tile. This tile can be used directly on the slab, above or below grade, and with radiant heating. Brushwood comes in ten color combinations. In the pure vinyl Flor-Ever line, c-N is featuring tile with metallic gold inlays and a variety of bright background colors.

Congoleum-Nairn Inc, Kearny, N.J. For details, check No. 133 on coupon, p 236

B. F. Goodrich line is headed this year by new Corinthian vinyl tile. This translucent tile is being used on floors and walls. It is ½" thick, in 9"x9", 12"x12", and 36"x36" tiles, and comes in eight basic marble tones. Goodrich also has vinyl tiles in solid and marbleized colors, vinyl asbestos in carpet shades, asphalt tile in 30 colors, and a full line of rubber tile, including cushioned tile

B. F. Goodrich, Watertown, Mass. For details, check No. 134 on coupon, p 236



Here's a wood floor at a resilient-floor price

Mosaic wood flooring is shipped in sheets 18"x18". The sheets are laid in a special mastic on a dry slab or plywood subfloor, the paper topping is removed, and the floor is finished. Shown above is "Italian Micro-saic", a random

pattern of various hardwoods that compete in price with vinyl and rubber tile. Regular oak mosaic can be laid even cheaper, says the manufacturer.

Miller Brothers, Johnson City, Tenn. For details, check No. 135 on coupon, p 236



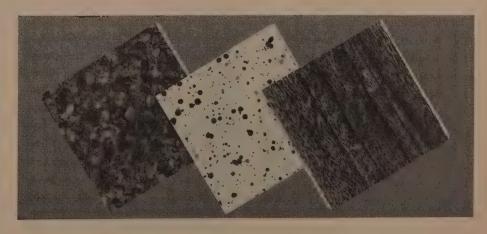
Prefinished block like the walnut flooring above is available ½" thick from Wood-Mosaic. In its economy line the company has a new ¼" laminated oak tile, that will compete, prefinished, with resilient tile. The 9"x9" tiles have t&g edges, are laid in mastic.

Wood-Mosaic Corp, Louisville.
For details, sheck No. 136 on coupon, p 236



Triangular ceramic tile opens new design possibilities for an old material. A new extra-service finish makes possible its use on floors, and it will soon be available in regular finishes for use on walls. Many colors are available to lend great variety to floor design.

Gladding, McBean, Los Angeles. For details, check No. 137 on coupon, p 236



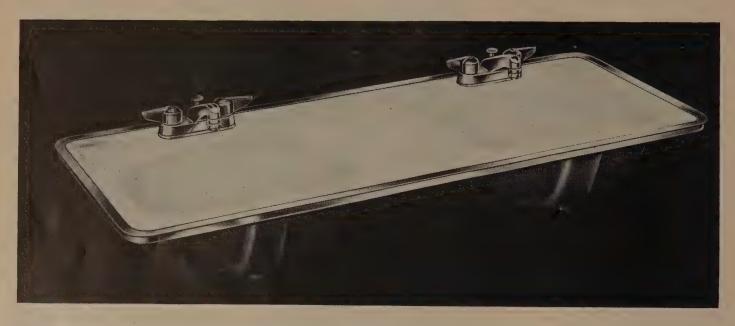
New bright colors in Amtico tile

Care-Free vinyl tile, Amtico's germproof tile first introduced in 1958, now comes in 16 colors and three patterns—Carousel, wood grain, and cork. Besides inhibiting surface bacteria, the tile is rot- and mildew-proof. The company also claims easy installation. Though solid vinyl, the tile is priced to compete with big-volume resilient floorings.

American Biltrite Rubber, Trenton. For details, check No. 138 on coupon, p 236

BATHROOMS

In 1959, quality is the keynote. Fixtures are styled better, made better, priced better, and—through the Privazone promotion—sold better. (See p 123 and H&H Mar '58, p 188.) Also notable: small knobbed fittings that look neat, save wear; more use of quality metals—brass, Monel, stainless steel—and more use of quality plastics—nylon, Teflon, polyethylene.



Here is a twin-bowl lavatory to drop in a countertop

Universal-Rundle's new Dulavoir lavatory gives you two 16"x11" basins in a 45"x17" overall countertop model. Fittings are all brass, chrome-plated, in either 4" center or 8" combination

style. Finish trim is stainless steel mounting frame, available from U-R or other suppliers. Also new from U-R: 38"x39" Mayfair tub, Como one-piece closet, Camille lavatory with Uni-Dial

mixing faucet. A new anti-sweat tank will be shown for the first time at the NAHB show.

Universal-Rundle, New Castle, Pa. For details, check No. 139 on coupon, p 236

Ingersoll-Humphryes has added two new lavatories to its fixture line: Carleton, a 19"x17" cast-iron ledge-back and Capital, a 19"x17" china shelf-back. The Duquesne, 1-H's original 19"x17" china ledge-back is now available in a 20"x18" size. All come in white and six pastel colors. Also new, Allegheny, a 4½' long 14" high cast-iron recess bathtub, which the makers claim offers extra roominess in a short length. Announced earlier, the Kent, a cast-iron sunken tub in 4½', 5', and 5½' lengths. Ingersoll-Humphryes, Mansfield, Ohio. For details, check No. 140 on coupon, p 236

yne
as
n,
so

News from Gerber is an economy-priced ledge-back china lavatory—the Lexington—that's big (22"x18"), has concealed overflow, anti-splash rim, two soap dishes, roomy ledge. Also new, the Washington siphon-jet close-coupled closet with an elongated bowl. Trapway is 21/8". Available in white and six colors. Gerber fittings are all-brass, are designed to fit any wall depth by simply sliding the escutcheon ring.

Gerber Plumbing Fixtures, Chicago. For details, check No. 143 on coupon, p 236

Eljer lavatory is designed to be built in, fittings are mounted on a raised slanted back. Alicia model is 20"x18", rim to rim, with a 15"x10³/₄" basin. Overflow is concealed at front.

Eljer, Pittsburgh.
For details, check No. 141 on coupon, p 236

Nylon tank valve has only two moving parts. Unit is unaffected by minerals or other bad water conditions and will work over a wide range of water pressures. Tank float is made of polyethylene. Retal price: about \$6.

Hydo Valve Corp, Austin, Tex. For details, check No. 144 on coupon, p 236 Richmond's line has four new lavatories: Richelieu—a wall-hung shelf-back model in four sizes (18"x15", 19"x17", 20"x18", 24"x20"); Futura—a deluxe modern design shelf-back with slant ledge, also in four sizes (30"x22", 26"x22", 22"x19", 20"x 18"); Summit—a flat-top model in two sizes (20"x18", 24"x20"); and Trimline—a wall-hung flat-back in three sizes (18"x15", 20"x18", 24"x20"). All are vitreous china; all come in white and seven colors. Also new, a single compartment laundry tub with 20-gal capacity in white earthenware.

Richmond Plumbing Fixtures, Metuchen, NJ.

For details, check No. 142 on coupon, p 236

Two-tone Case lavatory offers over 1,000 color combinations between the basin and slab from 48 decorator colors, black, and white. Basin and slab join in a leakproof mastic groove, are secured by special lugs. Front apron is concave. Lavatory is 22"x20" overall, basin is 15"x12". All fittings are chrome plated.

Case Mfg Corp, Buffalo.
For details, check No. 145 on coupon, p 236

Wascolite enclosures now are made with natural ferns, flowers, fabrics, etc, imbedded in the shatterproof acrylic panels. Aluminum frames for enclosures and shower doors are anodized to prevent corrosion, go in place quickly and cheaply. Doors lift out for cleaning.

Wasco Products, Cambridge, Mass. For details, check No. 146 on coupon, p 236

Brass bath accessories have been added to Donner's top-bracket Royal Chrome line. The line includes a wide variety of towel bars, soap dishes, grab bars, glass holders, robe hooks, towel rings, etc, for either flush or recessed mounting.

Donner Mfg Co, Sylmar, Calif. For details, check No. 147 on coupon, p 236 Wall-mounted cabinet from Lau Blower has concealed lights that shine down on the face, up at the room. Sliding mirror doors move in plastic channels, slant upward to give wider top shelves. Cabinets come 32" and 44" wide, in white and four colors.

Lau Blower Co, Dayton.

For details, check No. 148 on coupon, p 236



A-S adds a single-lever faucet

The new unit has a heavy cast-brass body, stainless steel valves, Monel sediment strainer. It operates at a finger's touch. Standard model is one-piece, top mounted; second model has a diverter valve and spray attachment. They fit basin tops to 11/4" thick. Chromium soap dish is optional.

American-Standard, New York City.

Polyethylene seat hinges are used

on C. F. Church's model 440 toilet

seat. The hinge is tougher than brass, nonbreakable, and corrosion-free. Color is molded in. Seat and cover are

C. F. Church, Holyoke, Mass.

For details, check No. 151 on coupon, p 236

finished in baked enamel.

For details, check No. 149 on coupon, p 236

Nylon shower head for use in hardwater areas will not "lime-up" or corrode, is claimed not to wear out or need maintenance. DuPont Zytel head will withstand 250F water at low pressures, 170F at pressures to 7,600 psi.

Nylon-Maid, Inc, Glendora, Calif. For details, check No. 152 on coupon, p 236

Stainless-steel closet base provides a nonabsorbent base for use with resilient flooring or carpeting. It is complete with brass closet bolts and stainless steel fastening screws. Closet rings fit 3" and 4" copper or 4" cast-iron or lead soil pipes. A template outlines exact recess when floor is laid.

Hollaender Mfg Co, Cincinnati. For details, check No. 154 on coupon, p 236



Save your tubs from accidents on the job with this corrugated boxboard Protectub, or with liquid vinyl Coatatub, or inexpensive Kraft paper Gum-a-tub. All three will prevent chips and cracks, save a lot of clean-up time when the house is ready.

Protectub Inc, Brooklyn.
For details, check No. 155 on coupon, p 236

Low-price tub enclosure, the Venus model, is made to fit any 5' recessed tub. Venus is glazed with 7/32" rolled glass; the aluminum frame has a bright finish. At \$89.90 list, this model completes a line headed by the Permalume model and including the medium-priced ShowerGlass model.

Shower Door Co of Amer, Atlanta. For details, check No. 156 on coupon, p 236



New lavatory pairs its faucet knobs

Controls are grouped on the shelf side of the spout to give easy one-hand use. Knobs are small to reduce pressure on valves. Wide shelf holds toilet articles. Vitreous-china Chaucer unit may be built in or stand on cabinet base or legs. It comes in six colors and white to match Briggs fixtures.

Briggs Mfg Co, Warren, Mich.

For details, check No. 150 on coupon, p 236

Speakman showerheads now help conserve water by limiting rate of flow to 4½ gpm for larger models, 2½ gpm for smaller model. Autoflo feature adds \$2 to cost of standard unit.

Speakman Co, Wilmington.

For details, check No. 153 on coupon, p 236



Locked compartment keeps dangerous drugs out of reach of children's hands in this new Lawson medicine cabinet. Unit needs 14"x24¾"x3½" wall opening, has 16"x26" mirror, two fluorescent lamps. Glide-Lok door stop is quiet and sure.

F. H. Lawson Co, Cincinnati.
For details, check No. 157 on coupon, p 236



INSIDE, the new *Thinline* air conditioner panel can be painted or papered to *blend* in with room décor. Easy-to-reach controls are hidden from view.



OUTSIDE, the Built-in *Thinline* has a "no-see-through" aluminum grille. It can be painted to match exterior. From street, it has a neat, built-in look.



New General Electric Built-in Thinline

Solves more builder problems than any other air conditioning system

Designed specifically for home builders. The new Built-in *Thinline's* aluminum case is exactly as high as two building blocks with mortar, six courses of standard brick, or five courses of jumbo brick. Case fits between a standard two-stud width. Unit actually becomes part of the wall.

Problem SOLVED! Cuts on-site costs—Your workmen build case into the wall during construction—slide the unit into place when the building is finished. No ductwork or plumbing needed.

Problem SOLVED! Preserves beauty of home—Inside panel can be painted or papered to match interior. It blends with room décor! Outside grille can be painted to match exterior.

Problem SOLVED! Flexible—You can now air condition as little or as much as you need to assure a quick, profitable sale.

Problem SOLVED! Economical—Saves you labor cost of ductwork and plumbing. This means the new General Electric Built-in *Thinline* system costs less than most central systems.

Problem SOLVED! Powerful, but quiet!—One model, packing up to 10,000 BTU's,* is enough to cool the large rooms in an average-sized house. A second complementary model, with extremely low noise level, is ideal for bedroom use.

Because your customers know the General Electric name. They know they're getting dependability and advanced design.

*Cooling capacities are tested and rated in compliance with ARI Standard 110-58 and are stated in British Thermal Units.



See your General Electric representative, or

SEND FOR FREE BOOKLET

Get the whole story. How you can save air conditioning dollars—and still give your home buyers the latest and *best* in home cooling.

Progress Is Our Most Important Product

GENERAL BELECTRIC

USE	THIS	HANDY	COUPON	TODAY!
General	Electric (Company, Dept.	2A.	

Appnance Park, I	Louisville 1, Kentuc	ky	
Please send me m with General Elec	y free copy of "Bu etric." Also send	ilding and Air Condition name of local distribute	ning
Street			
City	Zone	State	
Builder			
Architect			
TAT CHITCH			

Be sure to see NEWWAYS TO BUILD BETTER

A monthly report on home building ideas, products, and techniques

Starting here

What the leaders are doing



Why not put sit-down work space in your kitchens?



That's what two builders have done in the kitchens shown here. Their reason: women want to get off their feet while doing kitchen chores.

In the kitchen above, Dwight Haugen of Portland, Ore., left out cabinets under part of the counter. So a housewife can use the counter as a desk.

In the kitchen at left, Dave Edmunds of Clearwater, Fla., omitted cabinets under half of his double sink. So a housewife can be seated while peeling vegetables, rinsing dishes and loading the adjoining dishwasher.

Both builders used chairs as props to emphasize the sit-down feature to model-house visitors.

And on the following pages

Technology

News from the research front: a new low-cost dome made of 2x4s and plywood . . . Some basically new appliances in the offing for the 1960's . . . page 194

More

What the leaders are doing

The Mackles sell 280 houses in 30 days
... How to make each lot a lake-front
site ... Four ways Fox & Jacobs cut
materials handling costs ... The best
new ideas in selling with signs ...
page 200

Publications

31 new publications including catalogs of new lighting fixtures, masonry, treatments, windows and doors . . .

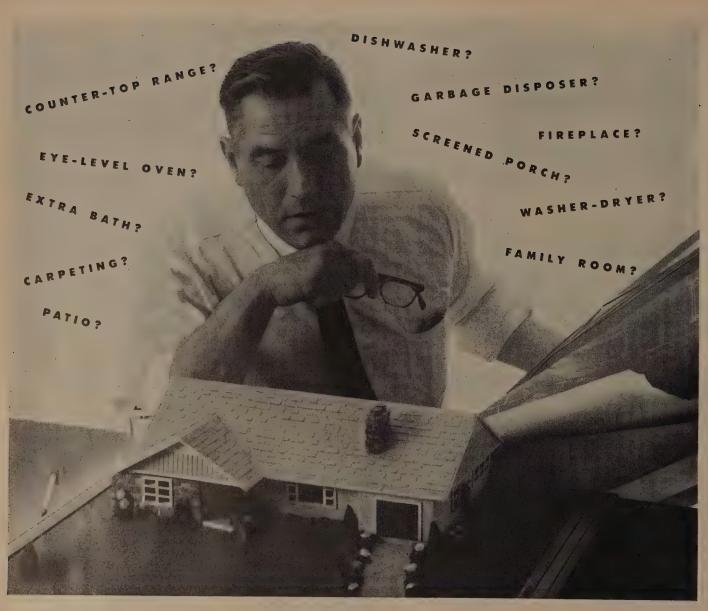
page 232

More

New products

H&H's big product show continues with what is new in windows, ceilings, exteriors, and all sorts of accessories and hardware . . .

page 214



...a Crawford Door gives you the "extra selling edge" you've been looking for

Time was when building a saleable house was largely a matter of pleasing design, quality construction and convenient location at a reasonable price.

You, the builder, competing for today's home buyer's dollar must consider additional features to attract the customer's interest and to provide yourself with that "extra selling edge."

The question is—what can you add that will not raise your selling price too high?

There is one answer you may have overlooked... feature a sales appealing, handsome, home-enhancing quality garage door. Fact is, you should if the garage faces the street.

A strikingly designed, distinctively styled, perhaps even tastefully "customized" Crawford garage door can materially add to the architectural beauty of your home and its customer appeal—with little additional cost.

Point is, a Crawford door, with its luxury-look, individuality and ease of operation, provides the "extra selling edge" you've been looking for. And if you'd like an additional "tie-breaker" you might consider a Delco-matic garage door operator. Ask your Crawford Distributor about it when you call him.



CRAWFORD DOOR COMPANY

215-20263 HOOVER ROAD . DETROIT 5, MICHIGAN

THE NEW! DIMENSIONAL

IN HARDWARE



Weiser's two-tone lock colors enable the builder to develop a more distinctive custom appearance through third dimension lock color.

By two-color contrast, Weiser Locks add a new dimension to each door.



WEISER LOCKS

WEISER COMPANY . SOUTH GATE, CALIFORNIA

Which is the most economical air conditioning for your houses?

There's no one best way—so much depends upon the size of houses, their architecture, the cost and availability of fuel and many other factors. That's why it's wise to consult your Carrier dealer before you draw your plans. He handles the largest line of air conditioning in the industry. (Four of the many products are described on these pages.) So his only interest is to recommend the type that short-cuts cost without sacrificing performance.

And this expert technical assistance is only the beginning. Your Carrier dealer can provide the kind

of tested promotional support that has made "Carrier Weathermaker Homes" the most-wanted houses in America. He can help you merchandise the air conditioning you install with everything from brochures to billboards. He can help you to bring the crowds to your sample houses.

So make a date to see the Carrier dealer listed in the Yellow Pages of your Classified Telephone Directory before another day goes by. Work with him and get the most from your air conditioning investment. Carrier Corporation, Syracuse, New York.



Will you offer heating and cooling as standard equipment? Choose this Year-Round Weathermaker. It combines matching heating and cooling sections. Shifts from winter heating to summer cooling with a flick of a switch. Requires no more space than an ordinary furnace. Air cooled. Available in oil or gas fired models. Heating capacities to 200,000 Btu/hr; cooling capacities from 1.9 to 4.9 tons.



How about a furnace that permits the addition of cooling later? Then this Carrier Winter Weathermaker or "Furnace with a Future" is for you. Plenum for cooling coils is installed with the furnace. Ducts are sized for heating and cooling and insulated where necessary. Electric service for both (at least 100 amp.) is provided. And condensate drain and outdoor pad for refrigeration section are included.



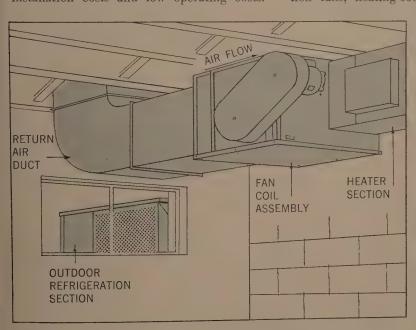
Do you want both heating and cooling at a budget price? Choose the revolutionary Carrier Thermo-Center. Consists of a Carrier furnace, the Winter Weathermaker (upflow or downflow) with plenum located next to an exterior wall. Duct connects plenum to outdoor cooling section (shown above). Costs hundreds of dollars less than conventional cooling systems and installation is quick and easy.



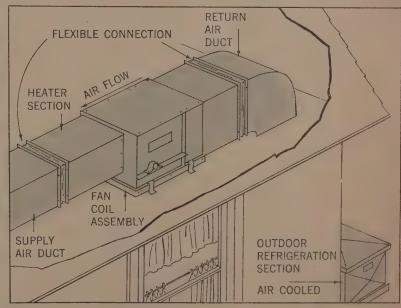
Here's the most efficient heat pump on the market today! It's the Carrier Heat Pump Weathermaker that offers low first cost, low installation costs and low operating costs.

Exclusive "Climate Balance" gives maximum efficiency over the year-round temperature range. Indoor Section consists of air-circulation fans, heating-cooling coil, filters and

auxiliary electric heater. It may be located in a variety of places (see below). Outdoor Section contains air-cooled condenser, refrigerant compressor and electric controls.



Heat Pump Weathermaker in basement or crawl space. Twopiece design permits location of Indoor Section under floor joists. This frees indoor living space (enough to provide a generous extra closet). The condensing section is located outdoors to eliminate the need for ductwork to bring in outside condensing air.



Heat Pump Weathermaker in attic or utility room. For slab construction, Indoor Section may be tucked away in attic. No gas pipes, oil lines, fuel tanks, chimneys or vents needed since only electricity is used as fuel. No water used for summer cooling. Capacities: heating—51,400 to 123,500 Btu/hr—cooling—2.5 to 4.7 tons.

Stop by the Carrier Booths (401, 402, 403) at the National Association of Home Builders Exposition, Hotel Sherman, Chicago, January 18th through 22nd. See our dramatic, comprehensive exhibit: 8 ways to air condition a house.





Presenting America's newest and most distinctive kitchen...

the



Magnificent new cabinet styling* with the newest and richest of finishes will focus greater interest on the homes you build.

These new Classic Kitchens will sell the homes you build! Here are lovely hardwood cabinets in step with modern styling trends. See the beautiful diamond-cut drawers, raised panel doors, and charming new ''life-time'' finish in beautiful rose champagne fruitwood.

Note the smooth, easy-to-keep clean surfaces with no dust-catching hardware showing anywhere. Classic Kitchens are classics in construction, too. Built like fine furniture from finest kiln-dried hardwoods, they'll last for generations.

And remember, Classic Kitchens are now offered in 150 different styles and sizes to fit the space and price requirements of the homes you build. New illustrated brochure gives full details. Write for your file copy now!

* So new and so distinctive we have patents pending and we'll defend our design rights, too . . . we've suffered from style piracy before.

Classic Photos courtesy of Everywoman's Family Circle Magazine



new features that mean greater sales appeal

Surveys show that housewives are enthusiastic about the extra features and super conveniences of the new CLASSIC Kitchens. Never have beauty and function been so smartly combined. See, for example, the roll-out work tables, wall oven cabinets, revolving corner shelves, extra drawers in every base cabinet, hidden bread boxes and cutting boards...and scores of other home selling ideas.

immediately available . . . everywhere!

New CLASSIC Kitchens as well as famous Yorktowne Kitchens, in hand-rubbed genuine birch, are all available from Yorktowne distributors in 60 major cities. So, go ahead with your plans, we'll have your cabinets ready to meet them.

fully guaranteed

All CLASSIC and Yorktowne Genuine Birch Kitchens are covered by written guarantees protecting you against any flaws in material or workmanship . . . for a period of five years from date of installation.



Of course . . . we are still building America's most popular kitchen



They are available in more than 150 sizes from warehouse stocks located in more than 60 centers.

Manufactured by

COLONIAL PRODUCTS CO., DALLASTOWN

DA

New Built-In Sales Appeal!





And...

for your extra-value homes

The eye-catching General Electric "Empress" 30-inch model. Actually holds a complete service for twelve people. Model SU-80.

Plus...

the sales appeal of a Disposall®

A specially budget-priced, high-quality, continuous-feed model that features really fast, easy, one-man installation! Model FC-15.

General Electric Dishwasher

designed and priced right for you!

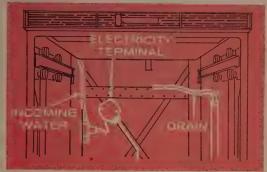


Model SU-60 Automatic Dishwasher—This "Princess" 24-inch budget-priced, quality-built dishwasher gives you General Electric's brand preference and consumer appeal with truly modern kitchen convenience.

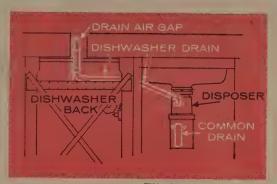
You get sales appeal, extra value, visible quality and the competitive plus which help sell your homes faster. It's available in 5 colors, 5 woods, brushed chrome and antique copper. Features famous Flushaway Drain, built-in pump, custom washing performance.

And, you get world-famous General Electric dependability and service.

Look at This Easy, Fast Installation



Saves Time And Work—Entire tub rolls right out of cabinet—and out of your way—while you make electrical and plumbing connections. (Four wood wedges let you shim and level cabinet while in place.)



Sanitary Drain Air Gap—Eliminates need for prior roughing in, provides maximum sanitation, uses one drain for both dishwasher and sink. (Optional sanitary drain also available which utilizes existing sink.)

We want to help you sell!

Besides budget-priced, high-quality models with easy installation and big sales appeal—we're ready to back you with a complete package of merchandising tools designed to help you really reap the benefits of nationally advertised General Electric Dishwashers and Disposalls.

For all of the profitable details get in touch with

your General Electric representative or mail the coupon below today!

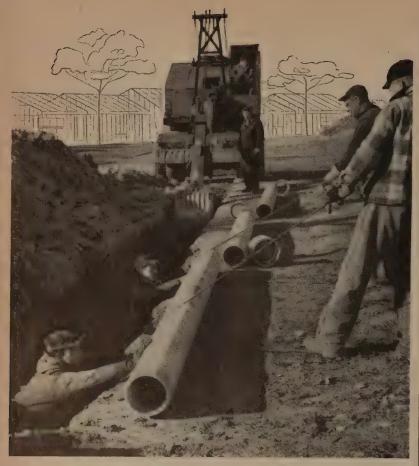
Watch for the big news!

Coming soon! A new 24-inch custom model dishwasher... the biggest and most exciting advance in automatic dishwashing in years. It'll be mighty important to homemakers, home buyers, and to you as an alert home builder.

Yes...

We'd like more detailed information about the new General Electric Dishwashers and Disposalls—and the promotion help which goes with them. No obligation, of course.

Appliance Park, Louisville 1, Kentucky	
NAME	
TITLE	
COMPA	ANY
ADDRI	ESS



Check the profit advantages in Transite sewer mains for your next development!



The familiar Ring-Tite® Coupling speeds and simplifies assembly of Transite Sewer Pipe.

✔ Higher appraisals✔ Greater unit profit✔ Faster, easier selling

Sweeping the nation's building industry is a new and profitable trend—builder-installed sewer mains for new developments!

Few innovations have offered builders so much practical help in increasing profits and reducing selling time.

Take your next development, for example. With its own sewer mains—you'll have higher appraisals . . . greater profit on every home you build. You'll sell faster, too, because buyers are eager to pay the nominal premium for this lifetime convenience.

With all these advantages—Transite® Sewer Pipe is easy to install. Lightweight in long, 13¹ lengths—Transite handles easily above and below ground . . . with special equipment needed only in the largest sizes. And the familiar Ring-Tite Coupling assembles quickly, surely . . . giving a tight seal to every coupling in the line.

Next time you see a profit opportunity in sewer mains for your homes call in your Johns-Manville representative. Meanwhile, let us send you illustrated brochures TR-165A and "What you need to know about Sewage." Write Johns-Manville, Box 14HH, New York 16, N. Y. In Canada, Port Credit, Ontario.

For the extra economy of an all
Transite Sewer system, specify Transite Building Sewer Pipe
for house to sewer connections



JOHNS-MANVILLE





Distinguished Styling

Style is the keynote of modern kitchen design — and Trade-Wind provides the most striking hood designs with which to accent the kitchen.

Customer Convenience

Space Saver designs free the entire cabinet for storage; the exclusive Touch-Bar simplifies control; real copper and stainless steel are specially finished for lifetime service.

Certified Performance

Every Trade-Wind Ventilating Hood and Ventilator is guaranteed to provide top capacity performance.

You'll Get EVEN MORE in '59 with Trade-Wind



Welcome to Booth 450-NAHB Show, Sherman Hotel

Trade-Vind Motorfans, Inc.

DIVISION OF ROBBINS & MYERS, INC.

7755 PARAMOUNT PLACE, PICO-RIVERA, CALIFORNIA



Announcing a NEW triple profit package for the builder!

More and more prospective homeowners are looking for ceiling tile in the homes they plan to buy.

In tune with this trend we are pleased to announce the addition of a new perforated ceiling tile to the Certain-teed line of building products. Made of tough wood fibers, Certain-teed ceiling tile is designed for lasting beauty - durability - and economical installation.

Another new product in the Certainteed line for '59 is an excellent quality low cost interior building board that has a superior finish . . . this, too, is made for quick, economical installation insuring better builder profits.

All over America Certain-teed colortuned roofs are going up on more and more homes because builders know they're in tune with the demand of homeowners for the RIGHT COLORS. Only Certainteed can offer you the new "Color-Tuned Roofing Systems" researched and designed by famous color authority Beatrice West. For the newest products in tune with the times and designed for profit - look to Certain-teed.

See the Certain-teed line for '59 at the NAHB convention — Chicago — Hotel Sherman—Booth 469—January 18-22.

Certain-teed ... Superior Products through Creative Research



Certain-teed Products Corporation Ardmore, Pa.

Plants and offices throughout the United States

AIR CONDITIONING PLUS HEATING FROM A SINGLE, COMPACT "CLIMATE MACHINE" THAT'S ENGINEERED AND PRICED FOR \$12,000 HOMES AND UP

now...a whole-house fit your present plans home sales in Chicago ...Miami – all over



No matter what you're building or where, the most dramatic sales feature in homebuilding today will cost you little more than you're spending for heating alone...will add thousands of dollars in extra value...and extra sales appeal

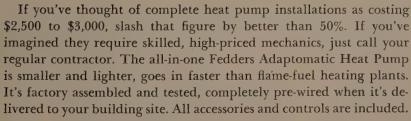
Chicago — 102 Fedders Adaptomatic Heat Pumps going into Leonard Gervasio's Lombard Lilac Gardens and Norman Schlossberg's Merideth Homes . . . Atlanta — Fedders Heat Pump featured in C. J. League and W. L. Jackson's 100-home River Springs Forest sub-division . . . Lima, Ohio — Buyers select Fedders Heat Pump for 27 of first 30 homes sold (at \$1,100 premium) in Dick Tettman's new 201-home sub-division . . . Miami — Fleetwood Manor, 500-home development featuring Fedders central heat pump, sold out in days.

From all over America, the evidence is piling in: something has happened that makes everything you have read or heard about the heat pump air conditioner out of date. It is no longer restricted to warmer climates, no longer reserved for custom-built homes.

The Fedders 3 HP Adaptomatic Heat Pump provides air conditioning in summer... the world's cleanest, most modern automatic heating in winter. And it's priced far below any combination of separate cooling and heating equipment available — costs only little more than a conventional heating system alone.

heat pump that will and prices is sparking ...Lima...Atlanta... the U.S.

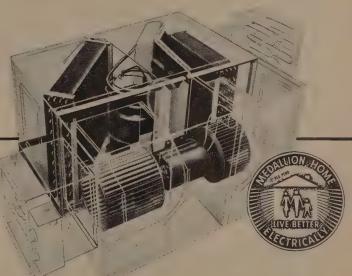
3 HP Adaptomatic Heat Pump incorporates pressurized condenser air system that permits installation in any interior location in existing house plans. Measures only 42"x 361/2"x 21".



Now for slightly more than you'd spend for an ordinary heating system, you can air condition your new homes summer and winter... and add more than \$1,000 in extra market value. This is the big feature on which to hang your merchandising and sales efforts, the most dramatic advance in homebuilding today.

Local electric power companies and cooperatives all over the U. S., which have tested and recommended the Fedders Adaptomatic Heat Pump, stand ready to help you promote and merchandise in substantial and effective ways as part of their all-out LBE Gold Medallion Home program.

Fedders provides attractive merchandising displays, consumer literature, ad mats that help you capitalize on the home comfort system of the future. Moreover, Fedders has a special plan to help development builders test the sales power of the Adaptomatic Heat Pump in model homes at extremely low cost. Call your wholesale distributor or mail the coupon direct to Fedders today.



FEDDERS HEAT PUMP AIR CONDITIONER

Fedders-Quigan Corp.— Dept. HH-19
Maspeth 78, New York

Gentlemen, please send me, without obligation, complete information on your Adaptomatic Heat Pump model home plan.

PLEASE PRINT

NAME

STREET ADDRESS

CITY

STATE

"Twindow Insulating Glass increases toward the



customer interest entire house,"

says C. R. DOHRN, contractor Bettendorf, Iowa





This enterprising contractor has been building homes in this attractive Davenport suburb for ten years. At present he is developing Highland Park which features \$50,000 homes on large, well-landscaped lots. All of the houses are custom built to owner specifications and—like this one shown here—have Twindow Insulating Glass in every window!

"I have found that the advantages and savings from the use of TWINDOW are equally important to the people who will buy homes in Highland Park as well as those who are interested in the moderately priced houses in our other development," explains Mr. Dohrn.

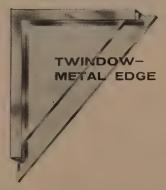
"We believe—and prove to our prospects—that Twindow will more than pay for itself in fuel savings and will make a more

livable and comfortable home. We point out that Twindow eliminates the need and trouble of putting up and taking down storm windows. After we explain these advantages we quickly note a much higher interest by the customer.

"It looks to us that very soon single glass in windows will be a thing of the past."

If Twindow Insulating Units make one builder's selling job easier, they can work for you, too. Why not get more information about Twindow? Find out about its salesappealing qualities, the ease with which it can be handled and installed. All of this is explained in our handsome Twindow booklet. Write today for your free copy! Pittsburgh Plate Glass Company, Room 9114, 632 Fort Duquesne Blvd., Pittsburgh 22, Pennsylvania.

TWO TYPES OF TWINDOW



TWINDOW—METAL EDGE. This type is ideal for large windows and where maximum insulation is needed. It's made up of two panes of ¼" clear-vision Plate Glass, with a ½" sealed air space between. Its stainless steel frame, a TWINDOW feature, eliminates bare edges . . . makes handling safe, quick and easy.



TWINDOW—GLASS EDGE. This type is just the thing for modern window wall construction. Having exceptional insulating properties, it is constructed of two panes of $\frac{1}{2}$ "PENNVERNON® — the quality window glass — with a $\frac{1}{2}$ air space between. TWINDOW — glass edge units are available in popular sizes for a variety of window styles.

TWINDOW

... the windowpane with insulation built in



AINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS . FIBER GLASS

ITTSBURGH PLATE GLASS COMPANY

IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

MORE SOUD VALUE THAN ANY OTHER BUILT-IN!



NEWLY DESIGNED WITH FEATURES AND GLAMOR STYLING NO WOMAN CAN RESIST... AND SENSATIONALLY PRICED!

Decorator Colors—Stainless Steel! Mellow Coppertone! Sunshine Yellow! Candy Pink!

Glamor Styling—Clean, modern design to complement every kitchen decor.

Choice of Surface Units - 2 burner units, or space-saving 4 burner clusters.

Automatic Clock-Controlled Oven (Electric) - Automatic carefree cooking for extra hours of leisure time.

Electric Clock and 4 Hour Timer - Times recipes to perfection.

Easy to Clean — Porcelain enamel or stainless steel finishes wipe clean with a damp sponge. Porcelain lined oven and Broiler.

Thermostatically Controlled Oven-Foolproof thermostatic controls maintain constant temperature as "dialed" for perfect baking.

Smokeless Broiling - Broils with door closed, on both gas and electric models.

FRANCHISES AVAILABLE IN SOME TERRITORIES-CONTACT:

WELBILT CORPORATION, WELBILT SQ., MASPETH 78, N.Y., EVERGREEN 6-4300

Sold outside U.S. and Canada by Welbilt International Corp., 415 Lexington Ave., New York City. Cable Address: Welbiltco.

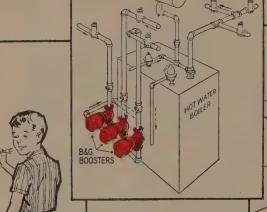
LOW-COST COMFORT ZONING ADDS SALES VALUE TO YOUR HOMES



A zoned B&G Hydro-Flo Heating System endows your homes with that touch of distinction which only a hydronic* forced hot water system can give.

Zoning a B&G Hydro-Flo System is the simple, low-cost way to have several different temperatures in the home. Only one boiler is needed to supply heat to as many zones as desired. For example, a sunny, draftless 72° in the living room—an invigorating 68° in the recreation room—and a cool 65° in the bedrooms.

The B&G Hydro-Flo System provides radiant heat, smoothly controlled to meet every variation in outdoor temperature. That's why this system uses so little fuel—none is wasted by over-heating. It also provides ample hot faucet water—winter and summer—heated by the same boiler that heats the house.



A typical 3-zone installation with each zone served by a thermostatically controlled B&G Booster Pump.

THE B&G BOOSTER...heart of the system

This electric pump, under thermostatic control, circulates hot water from the boiler through the heating system. Quiet operation and long-lived dependability are its outstanding characteristics. *Nearly 3,000,000 bave been installed to date!*

The Booster and auxiliary B&G Hydro-Flo equipment can be installed on any hot water heating boiler. A majority of boiler manufacturers include Hydro-Flo units as standard equipment on their "package" boilers.



Hydro-Flo SYSTEM BELL & GOSSETT

C O H D A N Y

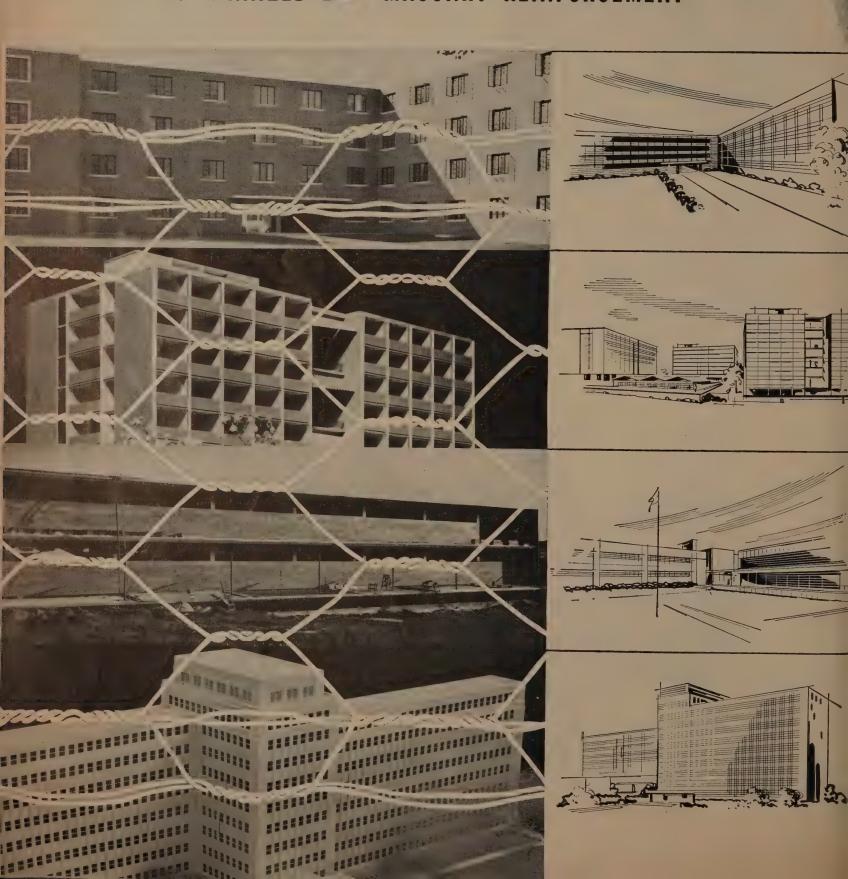
Dept. FO-10, Morton Grove, Illinois

Canadian Licensee: S. A. Armstrong, Ltd., 1400 O'Connor Drive, Toronto 16, Ontario

water₋

*Hydronics: The science of heating and cooling with

GALVANIZED MASONRY REINFORCEMENT



goes to college

Towa

lowa State College: Keywall masonry reinforcement approved for Helser Hall, a new men's dormitory at Iowa State College, Ames, Iowa. Architect: Brooks-Borg, Des Moines, Iowa; General Contractor: W. A. Klinger Construction Co., Sioux City, Iowa.

Missouri

University of Missouri: Three 9-story residence halls and a single cafeteria unit for women students being constructed at the University of Missouri, Columbia, Missouri. Keywall is being used in this vast project. Architect: Hellmuth, Obata and Kassabaum, St. Louis, Missouri. General Contractor: D. C. Bass & Sons, Enid, Oklahoma.

Kansas

University of Wichita: Keywall used in masonry curtain walls in the new Mathematics and Physics Building at the University of Wichita, Wichita, Kansas. Architect: W. I. Fisher & Company, Wichita, Kansas. General Contractor: Hahner & Foreman Inc., Wichita, Kan.

Indiana

Indiana University: The Elisha Ballantine Hall, a basic course classroom building at Indiana University, Bloomington, Indiana. Masonry walls are being reinforced with Keywall. Architect: A. M. Strauss Inc., Fort Wayne, Indiana. General Contractor: Huber, Hunt and Nichols Inc., Indianapolis, Indiana.

Campus buildings are getting greater reinforcement at lower cost

Architects accept Keywall masonry joint reinforcement for building projects at colleges and universities. Look at these new classroom buildings and residence halls at four leading universities. Masonry joints on these buildings are being reinforced with Keywall for added strength, greater crack resistance.

The ability of Keywall to increase lateral strength and reduce shrinkage cracks in masonry has been demonstrated on job after job. Recent tests confirm this superior quality. Architects know they're getting effective reinforcement at a savings.

Masons like Keywall...they use it as specified. They find it easy to handle and easy to adapt to a wide range of applications. Keywall can be lapped at corners without adding thickness to joints. Full embedment and a complete bond are assured.

Galvanized Keywall can be stored any place without rusting. No wonder Keywall wins wide acceptance among builders and architects!

Keywall is made for the following wall thicknesses: 4'', 6'', 8'', 10'' and 12''.

KEYSTONE STEEL & WIRE CO.

PEORIA 7, ILLINOIS

Keywall • Keycorner • Keymesh® Keystrip • Welded Wire Fabric





when you build in

HOTPOINT

you build in

PUBLIC PREFERENCE

Only Hotpoint offers builders such dramatic proof of public preference, for only Hotpoint has made over 5 million electric ranges.

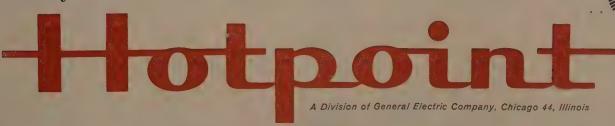
Hotpoint built-in ranges offer the same product leadership—in quality, in features and in styling—that has made this unprecedented sales record possible.

And, Hotpoint keeps building public preference for built-in ranges with powerful, full-color ads in Life and other leading magazines. It's advertising directed to *your* prospects to help sell Hotpoint-equipped homes.

With Hotpoint built-in ranges, you also enjoy many other important advantages. Hotpoint offers a complete built-in line, with ovens and surface cooking sections to fit every kitchen plan and budget. Hotpoint built-ins are designed to save space and installation costs, too. And, Hotpoint's new interchangeable oven door panels give your customers complete decorating freedom—colors can be changed easily in minutes.

Remember, home buyers look for quality, and Hotpoint built-ins reflect quality throughout the home. Put the sales power of Hotpoint's public preference in your homes now!

when you build in Hotpoint, you build in Public Preference



ELECTRIC RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · CUSTOMLINE DISHWASHERS · DISPOSALLS · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS



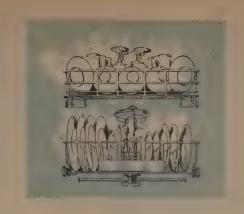




DISPOSALL® Food Waste Disposer

Now, famous Hotpoint super-hard cutting teeth plus newly designed grinding ring and flywheel dispose of food waste faster. Swing-free hammers virtually end jams. And the Hotpoint Disposall is easy to install because plumbers helped design it.

Hotpoint deluxe Dishwasher Model DC-1



A HOTPOINT DISHWASHER SAYS QUALITY ALL THROUGH THE HOME

When you build in a Hotpoint Dishwasher, you add elegance and quality to any home. Hotpoint's reputation for product leadership is without equal. Hotpoint developed the first practical automatic dishwasher, and, since then, has been first with virtually every significant advancement in dishwasher design.

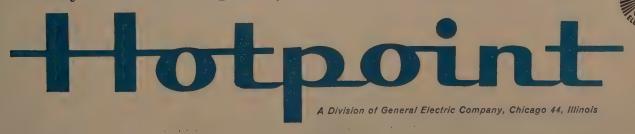
Such an achievement is Hotpoint's new Double-Deck Water Action. Only Hotpoint has separate water action for each rack that washes everything—glasses, dishes, silver, pots—spotlessly clean. And Hotpoint adds spotless rinsing, dual filtering and a separate utensil cycle.

Hotpoint continually builds its reputation for product leadership through dramatic full-color advertising in Life and other leading magazines. This powerful pre-selling builds public preference that means more sales for you.

The Hotpoint Dishwasher line has been designed expressly to meet builders' needs. Four models enable you to enjoy the sales power of Hotpoint quality whether you're building \$10,000 or \$100,000 homes. Your choice of 7 finishes and provision for natural wood. And, you save on installation—all plumbing and electrical connections can be made from the front.

Plan now for more sales—build in quality your prospects trust... with a Hotpoint Dishwasher.

when you build in Hotpoint, you build in Public Preference



ELECTRIC RANGES · REFRIGERATORS · AUTOMATIC WASHERS · CLOTHES DRYERS · CUSTOMLINE DISHWASHERS · DISPOSALLS* · WATER HEATERS · FOOD FREEZERS · AIR CONDITIONERS

Kitcheneen STEALS THE SHOW"

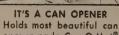
... says leading Kansas City developer

John H. Martin of John H. Martin & Sons, home builder of Kansas City, Kansas, builds many homes each year in the \$14,000 to \$20,000 price range. He is considered by his contemporaries as one of the area's leading home builders. Mr. Martin says: "Over 5,000 people visited my model home in one week during Kansas City's Parade of Homes. I was amazed at the interest shown in the Kitcheneer . . it really stole the show! The Kitcheneer will be a standard feature of all my new homes from now on."



IT'S A BOTTLE OPENER A time saver in any kitchen.

IT'S A KNIFE SHARPENER Keeps all your kitchen knives keen-edged.





The New Kitcheneering Unit fits snugly on the undersurface of any metal or wooden kitchen cabinet ... a decoratordesigned appliance-unit crafted with the kitchen-beautiful in mind.

******************************* Visit Booths 352-353

NATIONAL HOME BUILDERS SHOW CONRAD HILTON HOTEL, CHICAGO

Guaranteed by **Good Housekeeping**

MOTAS ADVERTISED THEREIT

KITCHENEERING COMPANY OF AMERICA . KANSAS CITY 29, MISSOURI

Kitcheneering Co. of America 6618 East 37th St. Dept. H-1 Kansas City 29, Missouri

INTRODUCTORY OFFER

Mail Coupon Today!

AMAZING

Send details on Amazing Introductory Offer. Send details on Complete Kitcheneering Line.

Company___

Address_

City_

NOW YOU CAN GIVE YOUR CUSTOMERS PETERSON QUALITY IN DOORS, TOO!

It's a DAISY!

this new aluminum sliding glass door by Peterson, a great name in aluminum windows

The new Daisy door by Peterson is supplied in heights of 6'10'' and 8', in 6' to 20' widths and special sizes, too; and with glazing in a wide variety of glass from $\frac{1}{8}''$ sheet glass to 1'' sealed units. And its exclusive adjustable track at the threshhold assures level installation on *every* job.

with PROWLER-PROOF VENTILATION

An important selling point of the Daisy is prowler-proof ventilation. It locks firmly and solidly in "closed" and three "open" positions. Daisy doors to 10' can be shipped assembled. Larger sizes shipped KD. For customer convenience, single glazed doors can be converted later to double glazed, by merely buying a new lite and changing glazing strips—no need to buy complete panels. Send coupon below for full details of this new nationally advertised, popular priced door.



A PRODUCT OF

Peterson Window Corp.

720 1D LIVERNOIS

FERNDALE 20, MICHIGAN

Makers of PENGUIN · SAPPHIRE · PARAGON Windows



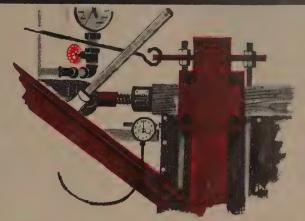
BARRETT

RIGIDWALL SHEATHING

meets every FHA Requirement-AND THEN SOME!



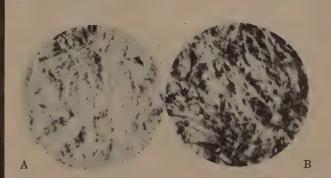
HOLDS NAILS BETTER! Tests prove that RIGIDWALL Insulating Sheathing holds nails 47% better in dry board and 91% better in wet board than the FHA requires for direct nailing of siding shingles to sheathing. That's the extra measure of solidity you get only with RIGIDWALL!



23% STRONGER BY TEST! Racking tests prove that RIGIDWALL is 23% stronger, on the average, than required by FHA for application without corner bracing. Wet strength is actually 44% greater than required. Here again, you get an extra measure of strength with RIGIDWALL!



SCORES CLEAN...BREAKS EVEN
Because of its extra rigidity, RIGIDWALL
Sheathing handles more easily...gives you less
waste. Extra strength also means fewer ruined
boards from smashed corners and edges—and
ultimately stronger finished construction.



MADE BY THE CHEM-FI PROCESS
This is the unique Barrett process that brings
the fiber strength of natural wood to insulating
board. Microphotograph A is ordinary board,
with fine powder-like particles throughout.
Microphotograph B is Barrett RIGIDWALL,
with long reinforcing fibers for extra strength!

The greatest improvement in insulating sheathing since its introduction. For samples and full information, call your Barrett representative or write us direct.

BARRETT DIVISION

40 Rector St., New York 6, N.Y.





MODELS OF DOME DESIGNS worked out by Pease designers show how the geodesic principle can be applied to a variety of building shapes.

Research develops low-cost domes of 2x4s and plywood

Using work-a-day materials and a simple erection system (see below), a research team at Pease Woodwork, Hamilton, Ohio has produced a geodesic dome that costs less than \$1.50 a sq ft in place.

The basic package for a 26'-dia clear-span dome will sell for \$596, can be erected by two men in a day. Pease expects to sell its early models for farm buildings, storage sheds, and the like (see H&H, Dec, p 95). Although Pease has no present plans to use the new structures for houses,

the domes do have an important message for homebuilding. The message: it costs less to use traditional materials in a highly engineered dome—a tremendously strong shape that must be built with 1/100" tolerances—than to use those same materials in a simple rectangle—a basically weak shape that needs bracing and can be built with ½" tolerances.

The 2x4-framed plywood triangles (about 8' on a side) used in the dome can be disassembled, re-erected. Windows, ventilators, heating can be installed several ways.

Here is how the wood geodesic dome goes together in less than a day:



1 Sole plate sections for ten-sided dome are mitered, dropped down over pre-set anchor bolts. Plate has been pressure-treated with preservative.



2 Base triangles are set in place over anchor bolts. Fastening (with ratchet wrench) secures both plate and triangle to foundation.



3 Adjacent panels are bolted together. Four pairs of base triangles, plus door assemblies, complete base of dome. Holes are for ventilators.



Detail shows how chamfered 2x4 edge members of triangles meet at just the proper angle. Pressure-sensitive aluminum tape seals panel joints.

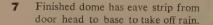


5 Above base triangles, only two other shapes are required: equilateral triangles (6 needed) and isosceles triangles (24). Windows are preinstalled.



G Temporary bracing is needed as erection approaches dome closure.

Mid-bracing 2x4s in triangles stop short of corners to leave bolting room.





by Inland Homes



Startling New Value

Widen your market with the quality-packed Thunderbird Series, designed to sell for \$8150 plus lot.

Find out TODAY. Visit, phone, or write P. R. Thompson, Vice President, Sales-Phone PRospect 3.7550, Piqua, Ohio.





12 Colonial, Contemporary, French Provincial, and Ranch designs. All architect-designed.



Over 1,000 sq. ft. with big living room, kitchen, dining space, and 3 bedrooms.



2" x 4" construction throughout.



Cedar shakes are factory applied and doublecoursed. Horizontal siding also available, or sheathing only for brick.



Double wall construction with impregnated insulated sheathing.



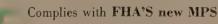
Prehung flush doors throughout.

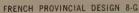


Birch wood kitchen cabinets.



Also includes exterior wall sections, gables, roof trusses, roof sheathing, roofing. hardware, interior partitions, interior trim, insulation—and much more.











INLAND HOMES CORPORATION . Plants in Piqua, Ohio and Hanover, Pa.

See us at the NAHB Show-space 931-Coliseum

Technology

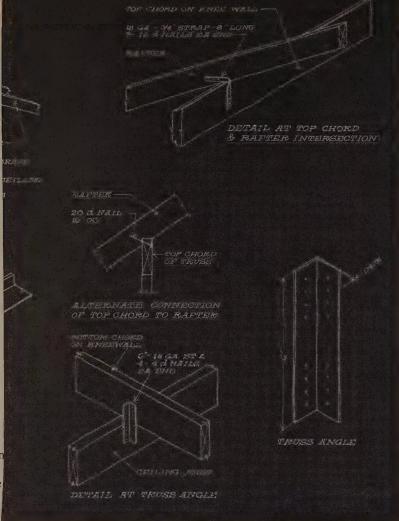
starts on p 194

Research points the way to basically new appliances for the 1960s

The experimental models shown on this page are exan of new appliances based on new engineering principles; use heat pumps, thermo-electric heating/cooling, more cient methods of gas combustion.

None of these appliances is on the market. Some never be (though all except the unit at the right are a working models). But they all give you a glimpse or roof panels, so lighter members can be used. Details, right, show connections. kind of ideas now being worked out in the laboratori most of the major appliance makers.

"Our future in the industry will be determined by eng ing principles."



An official of one major manufacturer sums up this ime, work, and material

onough, ts them 1 frame

or walls 4s) are the oution and fastened to the ceiling panels with steel angles (the truss now supports the center of ceiling panel). 3) The roof panels (sheathing fastened to 2x4s) are placed, nailed.

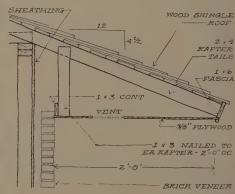
Without the kneewall trusses, the panel framing members would have to be 2x6s and 2x10s, and the big panels would be a lot heavier and harder to handle.

Trusses usually come in two sections, so inner ends of adjoining sections must rest on a transverse bearing wall.



Heat-pump drier is said to dry as fast as a 220-volt drier, though it operates on 110 volts and would use only half as much power. No vent is needed because heat is picked up by an accumulator (evaporator) coil and is reused. General Electric.



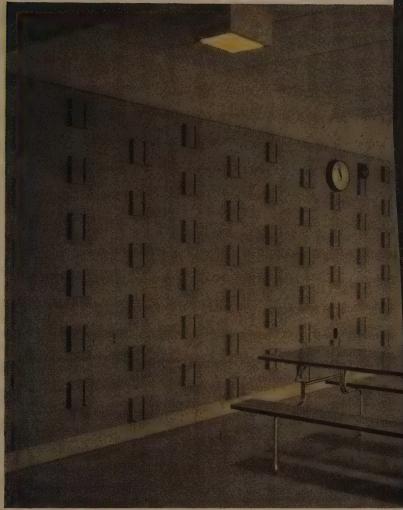


Suspended soffit cuts costs

This detail by Fox & Jacobs, Dallas, eliminates the horizontal 2x4 lookouts frequently used as nailers for a soffit, and the frieze board frequently used to hide the top of brick veneer. F&J's fascia has a dado cut to take outer edge of soffit; inner edge is held up by 1x3s nailed to rafter tails.

DUR-U:WAL S OF MASONRY

Throughout the United Stat Reinforcing is being used in th protection for the classic bea

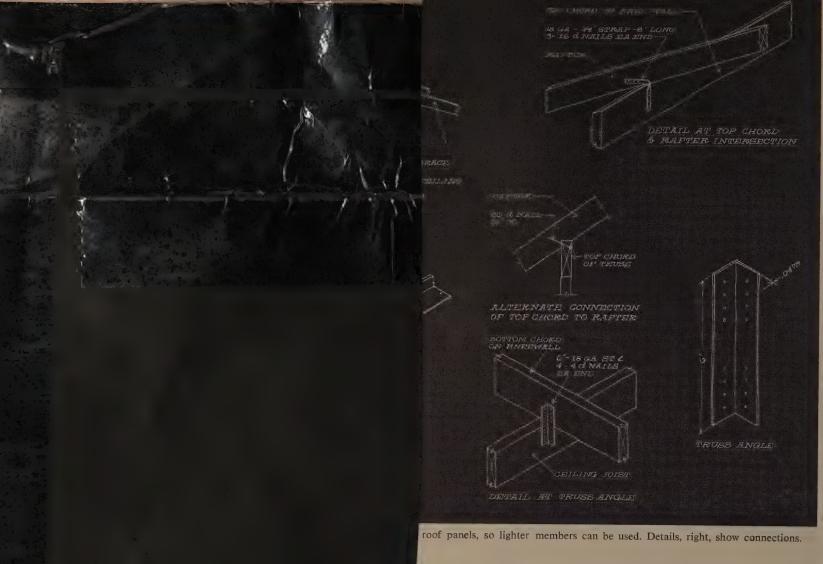


You can provide timeless protection for the flawless beauty of masonry with time-tested Dur-O-waL. This high-

Specifications and Research







ime, work, and material

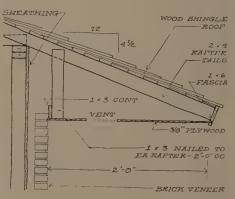
briough, ts them

or walls 4s) are the oution and fastened to the ceiling panels with steel angles (the truss now supports the center of ceiling panel). 3) The roof panels (sheathing fastened to 2x4s) are placed, nailed.

Without the kneewall trusses, the panel framing members would have to be 2x6s and 2x10s, and the big panels would be a lot heavier and harder to handle.

Trusses usually come in two sections, so inner ends of adjoining sections must rest on a transverse bearing wall.



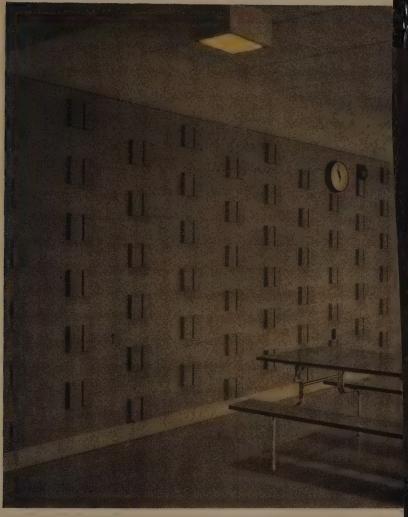


Suspended soffit cuts costs

This detail by Fox & Jacobs, Dallas, eliminates the horizontal 2x4 lookouts frequently used as nailers for a soffit, and the frieze board frequently used to hide the top of brick veneer. F&J's fascia has a dado cut to take outer edge of soffit; inner edge is held up by 1x3s nailed to rafter tails.

DUR-O:WAL S OF MASONRY

Throughout the United Stat Reinforcing is being used in the protection for the classic bea



You can provide timeless protection for the flawless beauty of masonry with time-tested Dur-O-waL. This high-

Specifications and Research







Mackle's newest Florida community



ed in one of 50 booths.

Inside the 10-acre fenced area above, the Mackle Co has set up what it calls "the biggest home show ever staged by a single company."

Aim of the "Exposition of Homes": to help sell the 900 houses at Mackle's Pompano Beach Highlands. Results: 280 sales in the first 30 days.

The exposition's theme—"Conquest of Space"—dramatizes Mackle's claim that "every inch of space in these homes is usable working space." Visitors enter through a 70' simulated rocket (left foreground above). From a platform in the rocket they see the whole area—10 models priced from \$9,385 to \$14,900, 50 display booths of manufacturers' brand-name products, a playground, refreshment booths, and picnic grounds.

A \$60,000 local advertising campaign—using radio, TV, and newspapers—promoted the show's opening. First day's turnout: over 61,000.



builders' houses

for your best buy."
s City, Fred Olsen (center
to) and his salesmen wear
orms to promote his Bel Air
where models are named
race courses.



Rear overhead door is a popular feature of this garage, says Builder Ray Wilson, Muncie, Ind. Reason: it turns the garage into a breezeway, makes possible a shaded sitting area hidden from the street. Overhead Door Co has picked up the idea, now offers screened-in sash in place of garage-door panels.

From other builders: sales ideas you can use

"Leave off bathroom doors in your models. That's how we get around the touchy problem of asking visitors not to use the bathrooms or of buying plywood cutouts to fit over the toilets. We leave hinges and pins on the door frames, so it's obvious the house isn't sold without bathroom doors"—Jack Worthman, Ft Wayne.

"Tie in giveaways with the names of your models. We named three models after roses (American Beauty, Sweetbriar, Picardy), then ran ads offering an American Beauty rose to every woman visitor during opening week. Cost was 5ϕ a rose and well worth it."

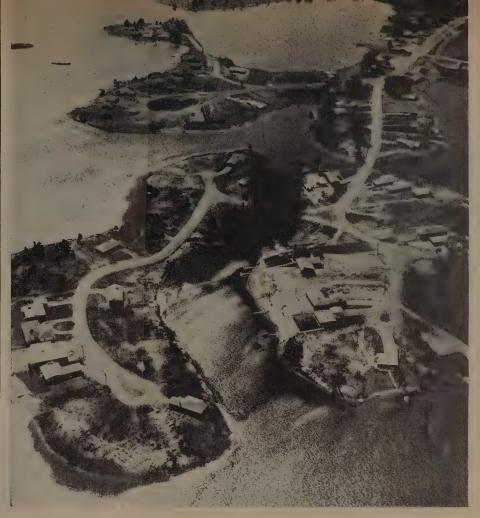
—Myron B. Sloane, Elkins Park, Pa.

"Send a magazine subscription as a post-sales gift to home buyers—preferably a shelter magazine. We send a year's subscription to Sunset, 'the magazine of western living'. Sunset supplies gift cards and envelopes on which we print our name and trademark. A gift like this makes a more lasting impression than flowers, champagne, and the like. It's more helpful to the home owner. And it costs less (\$1.50 a house)"—Harvey Furgatch, American Housing Guild, San Diego.

"Offer floor-covering options. In our development near New Orleans, we provide vinyl-asbestos flooring with a 1,300 sq ft model that sells for \$19,750. But in the bedrooms, living room, and dining room (about 800 sq ft), we offer buyers oak block floors for \$76 extra, wall-to-wall carpeting for \$520 more. Square-foot, in-place costs of our flooring materials are 35ϕ for vinyl-asbestos, 47ϕ for oak block, \$1 for carpeting"—Dave Slipher, Webb & Knapp, New York City.

"Substitute a den for the garage in one of your model houses. We charge \$400 for the finished den (or playroom), and stop the driveway about 20' from the street. Of our last 60 buyers, 43 chose the finished room instead of the garage"—Bob Fox, Plymouth Meeting, Pa.

"Sell shrubs at bargain prices if yoù want your homeowners to make your development more attractive. Twice a year we send out handbills advertising plantings at one-third off. Then we park truckloads of shrubs and flowers at street intersections where homes are already well landscaped—the sight of attractively planted lots gives people an idea of what they can do with their own places. Why not simply provide landscape plans? Because they'd cost us as much as a discount sale, and many people can't read them"—Al Balch, Seattle.



On reclaimed land: every house has a lake-front site

If you're ignoring close-in land because it's low and hard to drain, look what the developers of Sherwood Lake did with marshland just an hour's drive from downtown Detroit.

Using drag lines to dig out bays and inlets and installing big (48")

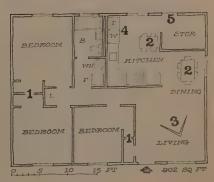
Armco pipe as permanent drains, Lake Shore Development Co turned a sparsely settled area of summer cottages into a year-round luxury colony of \$30,000 to \$40,00 houses. Now lots—all with lake frontage—are selling for up to \$10,000.



Here's a little house with five large-house features

As the numbered plan shows, this manufactured house has: 1) big closets (almost twice the new MPS requirements, 2) two dining areas, 3) a kitchen that's screened from the living room, 4) a laundry in a light area in the kitchen, 5) a back door that opens into a storage area, not into the kitchen.

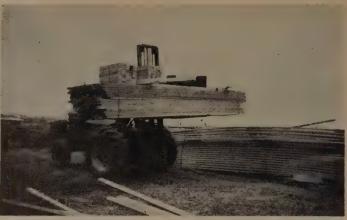
The house sells for as low as \$6,900 without lot. It is being produced by Harnischfeger Homes, Port Washington, Wis., designed by L. Morgan Yost.



continued on p 202



USE A TRAILER to haul components from assembly yard to sine.



2. USE A FORK-LIFT TRACTOR to tote materials on rough ground.



3. USE A PALLET RACK to move parts like door bucks by fork lift.



4. USE A "JUNK WAGON" to collect debris and odds and ends.

Here are four ways to cut the cost of moving materials

All four simplify materials handling for Fox & Jacobs, Dallas.

1. The trailer (upper left) moves pre-cut studs and pre-assembled headers from F&J's yard to building sites. A rack between the wheels is used to carry other lumber.

2. The International fork-lift tractor

(upper right) covers rugged ground around houses that would stymie a fork-lift truck. It can carry 100 sheets of plywood, horist 20 squares of shingles

to a roof at other.

3. The pallet rack (lower left) is loaded in the yard, delivered to the site by truck or trailer, and fork-lifted

to the house slab, where it stays until

4. The "junk wagon" (lower right) is parked between houses where workmen can throw debris, like broken bricks and bits of dry-wall, into it instead of on the ground. So less time is spent later in policing up the site.



Now erection equipment comes with prefab package

The new crane in action at left is mounted behind the cab of a tractortrailer that delivers manufactured-house packages to builder-dealers.

General Homes, Ft Wayne, uses the crane to solve this builder problem: either he has to round up a large crew to handle heavy components, or he has to coordinate the arrival of powered handling equipment with the arrival of the house package.

General rents the tractor-mounted crane to builders at \$30 for the first hour and \$5 for each additional hour on the same day. Using it to unload and position wall panels, trusses, and bundles of shingles and sheathing, three men can erect a house in four hours, General says.

The 35' crane (made by Teale Mfg) jack-knifes down to 8' when not in use. It is powered by the tractor.



- WITHOUT PAYING A PREMIUM!

Price Trends of Principal Building Materials Emphasize the Economy of Concrete Block ...

Your new building must have beauty and dignity... something substantial, enduring and eye-appealing. At the same time, it must stay within strict budget limitations. To meet all these requirements, use Vibrapac Block—the popular, versatile building material.

Vibrapac Block...in the creative hands of capable architects and builders ... has become, in effect, a new building material. It is available in a variety of patterns and modular sizes that enable architects and builders to create a myriad of beautiful effects...basket weaves...ashlar patterns...running bond...vertical stacking, etc.

And Vibrapac Block is a low cost building material. Data compiled by the U. S. Dept. of Commerce (see table at right) emphasizes the economy of concrete block masonry. In addition, the ease and speed with which Vibrapac Block can be laid, provide marked savings in time, labor and materials.

Yes, Vibrapac Block gives you beauty and permanence at an amazingly low cost. Why not learn more about this modern building material? Your nearby Vibrapac Block plant will gladly give you all the facts.

BESSER Company

DEPT. 175 • ALPENA, MICHIGAN, U. S. A.,
First in Concrete Block Machines

izes the economy of with which Vibrapac abor and materials. ace at an amazingly ding material? Your the facts.

Low-height units, in running bond, were used for this attractive California home.

Note the charm and beauty of this exposed

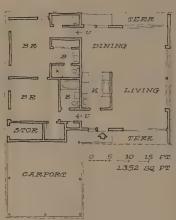
Price trends of various building materials as

compiled by U. S. Department of Commerce.

A8-165-R

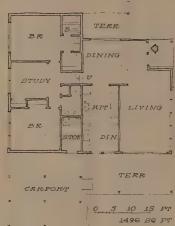
Vibrapac Block residence.





"From custom houses like this, you can borrow ideas . . .





... to help you sell built-for-sale models like this"

So says Tampa's Matt Jetton who built both the houses shown above.

He adds: "If you keep your eye on what appeals most to custom-house clients you can often find out what people in your built-for-sale market will accept."

From their custom house, Jetton and Designer Betty Wild got these 10 ideas that spurred the sales of his built-forsale model: 1) contemporary styling, 2) a masonry exterior, 3) split levels to fit a gentle slope, 4) a double carport, 5) plenty of floor-to-ceiling glass, 6) deep overhangs to fend off the sun, 7) a covered terrace, 8) a double in-

line kitchen, 9) skylights in the kitchen and baths, 10) walk-in closets.

But the two houses are far from identical. The custom house has a flat roof and an open plan. The readybuilt model has a low-pitched roof and a relatively closed plan—a storage wall screens the dining area from the living room and the front entry; the kitchen is closed off from the living room, and can also be closed from the dining area by sliding doors.

The custom house has two bedrooms, cost \$19,700 with land. The ready-built has three bedrooms, is priced at \$22,900 with land.



KITCHEN of built-for-sale house can be shut off from dining area by sliding doors.



This sticker is a profit builder.

It reminds home buyers that the windows in the home they are about to buy are equipped with the finest metal weatherstrip and sash balance available... Zegers Dura-seal. This "Advertised in LIFE" sticker helps you sell the quality features in the home you have built. Dura-seal is the only product of its kind backed by national advertising. Let this sticker work for you! Contact your lumber dealer—he will show you an actual sample and explain the many Dura-seal benefits. Zegers, Incorporated, 8090 South Chicago Avenue, Chicago 17, Illinois



Send for this free booklet, "Today—Quality Sells The Home Buyer." It tells all about Duraseal and the entire promotion program back of it.



JANUARY 1959 205





Quick quiz: Can you pick the billboard that pulled more prospects?

The one at the right, says Jackson, Miss., Builder Bill Underwood, who tried them both.

Why? Because it has less copy, fewer ideas, and more legible lettering. Its

sole mission: to call attention to Underwood's over-all operation in six different neighborhoods—not to present details like price, features and community facilities.

Says Underwood, chairman of NAHB'S Merchandising Committee: "You've got to keep a billboard simple if you expect people to read it at a glance from passing cars."



TEASER POSTERS on billboards at heavy traffic points and other stunts (see photos below) aroused curiosity about identity of "TL".



NEW POSTERS identifying "TL" were pasted on same billboards on "TL Day", the opening day of Trendsetter Lane Community.

Would this teaser work for you?

It worked for Seattle Builders Bell & Valdez—helped them boost their 1958 fall sales by a third over the same period in 1957.

Three weeks before the opening of their new Trendsetter Lane community, B&V started stirring up talk with their "TL is coming" campaign. They used billboards (above left) plus some eye-

catching stunts (below and right). On opening day newspaper ads and bill-boards (above right) finally let the public in on TL's identity.

Too much razzle-dazzle? The builders doubt it: "We got the crowds out, and the more people you expose, the more you sell." They sold 96 houses averaging \$16,450.



"TL" PARASOLS were twirled by twin models who gave football schedules to shoppers.



"TL" TEASER ADS were carried by 125 service trucks of a local utility.



"TL" BALLOON WITH TRAILER hovered over downtown area, stirred up lots of talk.

HOMES FOR BETTER LIVING AWARDS

for architects, builders, and homeowners in the South

Awards will be made in two major categories:

- 1 Houses designed specifically for an individual owner, divided into three classes according to size:
 - a. Under 1,600 sq ft of living space.
 - b. Between 1,600 sq ft and 2,800 sq ft of living space.
 - c. Over 2,800 sq ft of living space.
- 2 Houses designed for a merchant builder and sold speculatively, divided into three classes according to sales price:
 - a. Under \$15,000
 - b. \$15,000 to \$20,000
 - c. Over \$20,000

ENTRY SLIP

To the Committee for the Homes for Better Living Awards American Institute of Architects 1735 New York Avenue N. W. Washington 6, D. C.

HOMES FOR BETTER LIVING AWARD

CATEGORY & CLASS OF HOME

LOCATION

OWNER

ARCHITECT

BUILDER

SUBMITTED BY

ADDRESS

Enclosed is....(check)....(money order) in the amount of \$.....covering the above entry

This slip and entry fee must be in the hands of the committee by March 31, 1959.



brilliant knob designs and decorative escutcheons

bring exquisite beauty to every door, every room

Smartly styled in the modern mode, NATIONAL LOCKset enhances the beauty of interior and exterior doors alike. NATIONAL LOCKset offers you a complete selection of knob and decorative escutcheon designs . . . in all popular finishes. Special length latch bolts permit extended and center-door lockset mounting for striking and original effects. NATIONAL LOCKset is panicproof, secure and dependable in performance. Specify it with confidence . . . install it with pride.



HARDWARE FOR THE DISTINCTIVE HOME

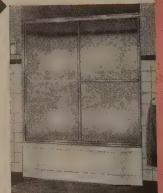
National Lock manufactures a variety of Medalist hardware items . . . sold by leading hardware and building material merchants everywhere.





Suggested \$ 5 4 9 5 Retail Price

Highly styled! Promotionally priced! Two towel bars, nylon bearings and hammered frosted glass makes this an outstanding retail value. For 41/2 or 5 foot recessed tubs.



NOW! AT NO INCREASE IN PRICE 7/32" GLASS

SHOWERITE

Consistently the best selling bathtub enclosure in America! Choice of hammered frosted or fluted glass. Contains two towel bars, nylon bearings. For 41/2 or 5 foot recessed tubs.





Suggested Retail Price

Ideal enclosure for bathing children. Three sliding panels afford more room . . . make cleaning easier. Features two towel bars. For 41/2 or 5 foot recessed tubs.



write for fully illustrated brochure of complete line

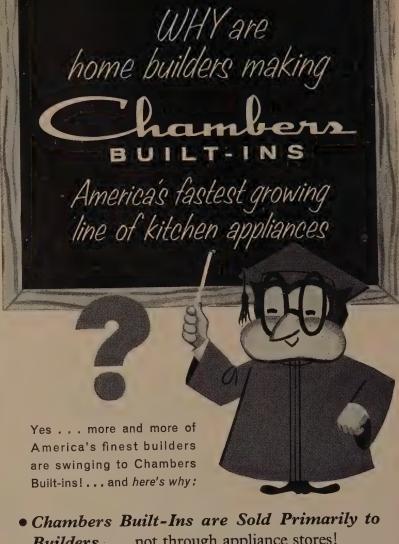


THEODORE EFRON MFG. CO. 7519 South Greenwood Ave. Chicago 19, Illinois

Dept. HH 159

Gentlemen: Please rush me information about ShoweRite products.

Name	
Address	



- Builders . . . not through appliance stores!
- It's a Perfectly Balanced Line of gas and electric ranges and ovens, truly built-in refrigeratorfreezers, dishwasher-dryers, ventilating hoods and disposers.
- It's Quality-Styled in pure plated Antique Copper, Silver Satin Chrome and gleaming Copperlux.
- It's Realistically Priced for every home—from budget to deluxe.
- A Nation-Wide Distributor Organization assures fast attention . . . whatever your problem.
- Powerful National and Local Advertising carries the exciting Chambers Built-in story to millions of homemakers—who know that Chambers is quality.
- Solves Your Service Headaches—with one call to order—one call to service all Chambers appliances! Get the exciting story at Chambers' NAHB Exhibit, 453-54 Sherman Hotel.

Chambers SINCE 1910 . . . the most honored name in America's finest kitchens

BUILT-INS, INC. CHAMBERS

2012 North Harlem Ave., Chicago 35, Illinois



WATCH HOMEMAKERS REACH FOR THIS NAME!

"Oh, yes!", she'll say. "These are PELLA ... the windows Marge has in her new home ... the ones with ROLSCREENS." Homebuyers know PELLA CASEMENTS, and their "Living Difference" made by ROLSCREENS, the original inside screens that roll up and down, and self-storing, Dual Glazing storm panels.

Show your prospects PELLA WOOD

CASEMENTS, and you automatically tell them: "This home has everything you're looking for." Factory-assembled PELLA WOOD CASEMENTS are available in 18 ventilating sizes with up to 24" x 68" glass. Use PELLA CASEMENTS. Find out how they strengthen the sales story of the homes you build. Distributors throughout U.S. and Canada.

.. See them at NAHB show — booth 18-19 Conrad Hilton



REMOVABLE MUNTIN BARS

Removable muntin bars snap in, snap out, for easy cleaning. Available for all PELLA WINDOWS.

ONE MIND	OW FOUR
DIFFERENT	APPEARANCES
REGULAR	HORIZONTAL

ROLSCREEN COMPANY, Dept. KB-1, Pella, lowa Send me literature on PELLA CASEMENTS . . . the windows that halp cell homes

NAME			
FIRM NAME		•	
ADDRESS	 		

Experts pointed out that plastic sandwich panels for walls and roofs are already developed



MAHER:
One encouraging and frustrating thing has been that no one has asked for a sealing that is completely impossible or does not already exist—except perhaps at the cost you are willing to pay.



CONNOR:
We want to get the cost of houses down. It can be done by more emphasis on quick and easy assembly of parts in the field.



COLLINS:
Some dual - foam panels are excellent for acoustics, as vapor barriers, for insulation and in resistance to fire or puncture.



EYNON:
Urethanes are completely developed for assembly-line preparation of panels.
Where foaming in place is involved, urethane is doing pretty well.



GOGGIN:
The big problem with styrene foam panels is the joints, and we think it is being solved.



MCELHONE: We can be certain that you are going to have a good tight panel that is wellsealed.

The plastics industry, and more than a few designers and builders, have been experimenting with plastic panels for 15 years. Many of these panels have stood up well under test, and some—including Kopper's new styrene panel used in one of this year's Research Houses (see p 116)—have won FHA acceptance. So it may seem surprising that they are not widely used, or even widely tested.

One reason they are not more widely used is that the plastics industry has not talked much about them. But here is what experts said at the Round Table about panels:

Dow Chemical's Goggin pointed out that "Some installations made in houses back in 1944 are working well today. These styrene foam panels were used for perimeter insulation and as a moisture barrier. Termites don't seem to enjoy them much. . . . Panels with styrene foam inside and plywood outside have presented a problem at the joints but this is about solved."

Maher of Minnesota Mining said: "There are all kinds of sandwich panels. They run the gamut from aluminum expanded panels, which are probably stronger than builders would ever want; to honeycomb paper, sprays, polyesters, styrene foams, and styrene beads faced with aluminum, plywood, drywall, or any surface you want. They can have huge strength per pound."

But, said NAHB's Johnson, "The panels themselves are not enough. The problem is more complicated. A sandwich panel must be part of a system. So the cost of a panel is less important than the cost of the system, which includes the cost of joining the panels together."

Here is what experts said about joining panels

Said Maher: "No builder has asked for an adhesive [for joining panels] that does not exist or we cannot make, though perhaps they aren't in the cost range you are willing to pay or as easy to apply as you might like. Frankly, we shudder at the thought of buckets of adhesive finding their way onto a muddy vacant lot where a semi-skilled man will use them. You can have these adhesives, probably within a year, if you are willing to use our products under controlled conditions, and if you are ready to re-design or re-engineer some of your components to take advantage of our products.

"Sealings can be brushed, sprayed, flowed into place. They come in the form of ribbon or tape that can be dyecut and clapped into place anywhere. They rely on compression for sealing. These products can withstand water, solvents, temperatures to 400°. They

have been developed for other industries and they can be modified for houses.

"We are ready to take on any buyer who wants a thicker, or thinner, or faster, or slower, or lighter, or darker product than we have made before."

Asked Bartling: "Could builders get these sandwich panels with coatings at the contact edges which would be dry and non-sticking, delivered at the site so that workmen would merely add water or other solvent to activate the adhesive?"

Replied Maher: "It is practical. It is being done in other industries.

"Another point: Builders almost universally want to make buck joints. A buck joint is a miserable joint. If you must use it, use a key lock and less adhesive. This will increase your speed. That is what we mean when we say, You come part way and we'll come part way."

Here is how experts explained the differences between foam styrene and urethane

Explained Dow Chemical's Goggin:

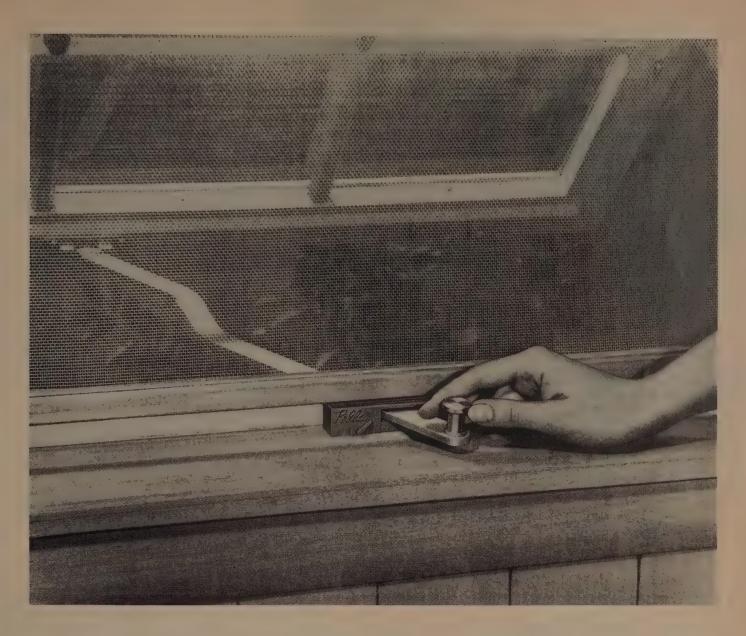
"Foam styrene is supplied in forms like wood and is sold on a board foot basis. It can laminate to plywood, metal, concrete, and other materials. It is rigid. It cannot be foamed on the site easily. But new forms are developed for foam-

ing in place which will act as their own adhesive.

"Urethane, a newer plastic, costs about twice as much per pound as styrene but can be foamed in place at the site and has a lower shipping cost. The K factor of urethane and styrene are

both about the same, about .25-.30."

Said American Houses' White: "Fabricators can work on this formula: cost per bd ft of urethane foam must be compared with the cost per bd ft of styrene plus two glue lines."



OPEN... THEN HELP CLOSE THE SALE WITH THIS NAME

If you want to add a well recognized MARK OF QUALITY to your homes . . . do it with PELLA MULTI-PURPOSE WOOD WINDOWS. Then you can sell the "living difference" that these windows make in a home.

Let prospects open and close the ventilating sash of PELLA M-P and TWINLITE WOOD WINDOWS with the exclusive, new GLIDE-LOCK ® underscreen operator. Demonstrate PELLA'S

REMOVABLE MUNTIN BAR feature and how outside glass can be cleaned from inside. Point out the time and work saved by inside self-storing storms and screens.

Use nationally advertised PELLA M-P and TWIN-LITE WINDOWS on one or more of your next jobs. See how they strengthen your sales story. For nearest PELLA distributor, see the classified telephone directory . . . or mail coupon.



REMOVABLE MUNTIN BARS Removable muntin bars snap in, snap out, for easy cleaning. Available for all PELLA WINDOWS.

DIFFERENT	APPEARANCES
HORIZONTAL	REGULAR
XX	
DIAMOND	STANDARD

ROLSCREEN COMPANY, Dept. KB-2, Pella, lowa
Please send literature on PELLA M-P and
TWINLITE WINDOWS.

NAME
FIRM NAME
ADDRESS
CITY & ZONE
STATE

The traditional bugaboos about using plastics in houses can be overcome, many participants felt



CARMAN:
Code officials prefer to work with
groups rather than
with manufacturers.
There is some education work to be
done.



SHOLZ:
The plastics people must help sell the new ideas to the people who enforce the codes.



DEMAREST:
We feel confident that plastics need not contribute added fire hazard.



SLIPHER: The plastics industry should look harder at the inside walls, where they can spread their highcost material thin



WILLIAMS: There is a problem of inertia, of closing the confidence gap.



BIGELOW:
The consumer does
not think of things
like waterproofing



KIRK: We should use plastic as plastic, not try to duplicate existing forms.



Our plastics industry has not done the selling job that the appliance industry has done.

"The plastics industry cannot just develop these products," said Home Manufacturer Don Scholz. "It has got to sell them . . . especially to the code people who control whether or not they can be used."

The Round Table did not delve deeply into the important code problem. But it did clear up one phase of the code problem by dispelling the fire-hazard bugaboo. And it did discuss the problem of selling the consumer on more use of plastic in housing, and it did discuss the present stand of the FHA.

"Plastics properly used create no additional fire hazards in houses"

This statement by spi's Cruse was endorsed by all of the experts at the Round Table who discussed the question of fire.

Said Monsanto's Gigliotti: "The plastic industry's position is simple—plastics must be rated on the same basis as any other material in building codes. Many plastics are used because of their fire resistance. . . . Styrene foam block would melt before it would burn. As

for smoke, this is really only a fireman's concern."

"Our rule of thumb," said William Demarest of Manufacturing Chemists Assn, "is that plastics present no greater problems in fires than wood."

"You won't get any more acrid fumes from plastics than from carpets, drapes, furniture or other furnishings in a house," said MIT's Professor Dietz.

Here's what two builders who are testing plastics think about consumer acceptance

Said Martin Bartling (who built the Knoxville Research House which uses plastic pipe):

"I am sure if the plastics companies come up with prices attractive enough, you will see that they have the greatest future. I think this is true despite the fact that plastics still have a bad name in the public's mind due partly to wartime substitutes."

Said Andy Place (who built the South

Bend Research House which uses plastic wall and roof panels):

"The more plastics we can get in finished forms that show in the house, the more we will be able to sell to the buyers. We have found our buyers will pay a lot more for things if they can see them in finished form. But I wonder if they are going to pay for something buried in the wall. Just try to buy your wife a diamond pendant that falls way down inside her dress."

Here is how Neil Connor summed up FHA's position

"Many of the plastics mentioned are used in quantity in some houses now. Some of those mentioned have never been submitted to FHA. Here is a quick summing-up of acceptance of plastics in various product categories:

"Plumbing: plastic laundry trays are accepted, but we are going slow on plumbing in general, waiting for the National Plumbing Code.

"Structural roof panels: we have had one submission which we are consider-

Structural walls: no submissions to FHA yet.

"Space frames: no submissions to Fha yet.

"Flashings: we have accepted some on the basis of tests. We hope the industry will help us with further tests.

"Waterproofings: accepted as membranes, but we have done nothing yet on spray films.

"Thermal insulation: some is accepted for slab perimeter insulation.

"Vapor barriers: polyethylene, PVC, and some others are accepted and still others are being tested.

"Finishes: plastic finishes are standard.

"Mechanical light and wiring: plastics are used extensively.

"Hardware: there is no question about wide use of plastics." /END



THIS seal says something about the house!

> On windows or doors, it's the mark of a quality home, a mark of the builder who doesn't cut corners to economize today and let the buyer pay tomorrow.

> Home owners stay satisfied with Schlegel weather-protected homes. Doors and windows sealed with Schlegel weatherstripping 20 years ago still work perfectly!

> There's no seep, screech or sticking when the seal is Schlegel Woven Pile. It's treated with Dow-Corning silicone for superior moisture resistance—for snug fit,

smooth-working resilience, permanence. Nothing else-metal, felt, rubber or plastic-offers all the advantages of Schlegel Woven

Hundreds of manufacturers can furnish Schlegel weatherstripped doors and windows in many styles. We'll give you names and addresses. Just ask for "Your Guide to Windows and Doors." Schlegel Manufacturing Company, P. O.

Box 197, Rochester 1, N. Y. (or Oakville, Ontario, Canada).



for protection that's silent, smooth, and sure.







Full shelf area—no waste of costly heat or conditioned air.



ORDINARY HOOD . . . Pipes and ducts costly to install — take up valuable shelf space.

See your local distributor, or write: THE DUCTLESS HOOD CO., INC. 601 Plandome Road, Manhasset, N. Y.

DUCTS, VENTS AND OUTSIDE LOUVRES!

The Ductless Hood is also featured in the

OVENMASTER series—an air purifier for built-in ovens. Makes the kitchen complete!

NEW!... for other rooms: Clear

out smoke and dust with the built-in

Ductless Air Purifier

Visit us at Booth 896 . . . NAAHB, Chicago Coliseum

WINDOWS

The chief news in windows is easy installation. New bows, built to catch the traditional market, are installed in-a-piece or adapt to any depth or curvature. Popular new wood and metal sliders go in easily, call for less hardware. Structural windows are built into the house with the framing, in wood (see page 118) or metal. More and more windows are made with lift-out sash, giving easy access all around until the house is finished and making window cleaning safer and simple.



Now you can buy a load-bearing bow window

The Fabrow window shown above is available in 28 variations. All are three lights high, will take single, double, plate, or insulating glass. The unit is made of kiln-dried Douglas fir, is avail-

able knocked down or assembled and glazed. Fabrow also has a new economy single-hung window in 18 sizes.

Fabrow Mfg, Toledo.

For details, check No. 158 on coupon, p 236

Curtis' bow window has a universal mullion that permits any combination of stock Curtis windows to be combined in any pattern or curvature desired. The new bow is in the same price range as a usual flat window wall, Curtis reports. Units are shipped in-the-white, preglazed with single or double glass.

Curtis Co, Clinton, Iowa.

For details, check No. 159 on coupon, p 236

Lee Millwork's bow window comes in ten stock sizes to fit standard window openings. Construction is all of wood. Lights can be single or double glazed, or have awning sash. Hinges are installed, all hardware is included.

Lee Millwork Corp, Fair Lawn, N.J. For details, check No. 160 on coupon, p 236

Wisco double-hung and sliding aluminum windows, have an optional triple-track storm-screen that permits easy future installation of storm sash. Both types have integral fins.

Wisco Inc, Detroit.

For details, check No. 161 on coupon, p 236



New aluminum windows by Truscon can be adapted to every type of construction—frame, masonry, veneer—by attaching fins or anchors. In single or double hung types, windows have full wool-pile weatherstripping. Either "O" dimension non-adjustable mullions or adjustable mullions are available.

Republic Steel, Youngstown, Ohio. For details, check No. 162 on coupon, p 236



Two-in-one window is a unique new product of US Window. Besides its normal balanced double-hung action, each sash tilts on its horizontal axis to make washing easier and give awning style ventilation control. Sash can also be entirely lifted out by hand. Friction and sticking has been cut by eliminating metal-to-metal contact; the sash rides in vinyl tracks. Frame and sash are heavy-gauge aluminum.

US Window Corp, Indianapolis. For details, check No. 163 on coupon, p 236

Single-hung aluminum window, a new one for Cupples, features removable sash. It has an integral nail fin, with nailing grooves. Hardware for screens is integral, sash guides are of nylon, and operation is unusually quiet. says Cupples. Windows can be grouped with slender mullions; they come glazed or unglazed.

Cupples Products Corp, St Louis. For details, check No. 164 on coupon, p 236

Winter Seal is showing a horizontal sliding window built of extruded tubular aluminum. The Slide Master "500" windows are double glazed. Both sash and screen insert are easily removable for cleaning or re-glazing. Hardware is nylon. There is no metal-to-metal contact in the unit.

Winter Seal Corp, Detroit.

For details, check No. 165 on coupon, p 236

Peterson has a new sliding aluminum window and a new method of weather-stripping. The new window, the "Penguin," has vinyl muntin bars between the prime and storm lights, giving the window a traditional look without breaking the glass into hard-to-wash panes. The windows are available in vent heights to 5'. For weather stripping the new Peterson window has a foam plastic insert at the meeting rail.

Peterson Window, Ferndale, Mich. For details, check No. 166 on coupon, p 236

Long-Bell now has a complete line of wood window units. The new Long-Bell metal glide is a double-hung unit completely weatherstripped. Sizes 16" to 48" high are available. Sash is removable. Long-Bell's 4-way can be used as an awning, hopper, casement, or stationary sash, with sill drainage in any of these positions. Long-Bell also has a double awning unit whose sash tips for cleaning from inside.

Long-Bell, Longview, Wash.
For details, check No. 167 on coupon, p 236

Ualco has a new economy series of aluminum awning windows. The Series 95 windows have a compact operator, 1%" deep frame members, and 34" ventilator sections. As in other Ualco windows, ventilators make two allaround weathering contacts. Screen and storm sash for ventilating panes fit flush on the inside face of the window. A wide range of sizes and accessories are available in the line.

Southern Sash, Sheffield, Ala.
For details, check No. 168 on coupon, p 236

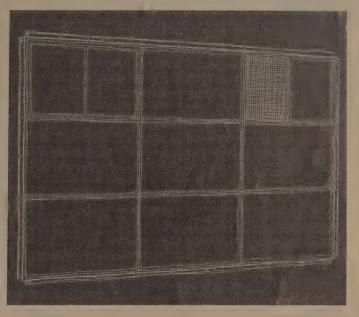


R-O-W has new removable wood windows

Both gliding and double-hung windows are offered in R-O-W's range of standard styles and sizes. Special sizes are made up locally. Some styles can be double-glazed. Windows are delivered sealed and toxic-treated, ready for painting.

R-o-w Sales Co, Ferndale, Mich.

For details, check No. 169 on coupon, p 236



Here is Capitol's new window wall

The window wall above is one of many new windows made by Capitol. It can be ordered in any size, and with any arrangement of fixed or sliding lights. All Capitol windows are aluminum, with vinyl glazing and weatherstripping.

Capital Products Corp, Mechanicsburg, Pa.

For details, check No. 170 on coupon, p 236

Inland Steel has added basement and utility windows to its Milcor line. Basement windows are available in aluminum or steel, with top or bottom opening, in three sizes. The utility windows are also in aluminum or steel, require little maintenance. Three models.

Inland Steel Products, Milwaukee. For details, check No. 171 on coupon, p 236

Ceco's new series 80 line of aluminum single-hung windows is aimed at the economy market. It has Spirex balances, wool pile weatherstripping, and integral nailing fins.

Ceco Steel Products Corp, Chicago. For details, check No. 172 on coupon, p 236

Silcrest has two new windows on the market this year. One, a basement unit, has dual hardware that permits it to be opened at top or bottom. Basic sash and frame are wood, storm sash and screen, aluminum. Also new, double-hung window with removable sash.

Silcrest Co, Wausau, Wis.

For details, check No. 173 on coupon, p 236



Insulated aluminum window is being offered by Textron. Since it is double glazed, storm sash is not needed. A Fiberglas screen gives insect control. The window comes in single- and double-hung, horizontal slide, and fixed sash models. It is fully weatherstripped to prevent metal-to-metal contact.

Textron Metals Co, Girard, Ohio. For details, check No. 174 on coupon, p 236

Brightness control glass called "Graylite" is new with Pittsburgh Plate. By cutting glare from sunlight, the need for blinds or shading devices is reduced. Graylite comes ½" and 7/32" thick, in stock sheet sizes up to 60"x84".

Pittsburgh Plate Glass, Pittsburgh. For details, check No. 175 on coupon, p 236

GlasSeal Thermopane has been added to L-o-F's insulating glass line. The new units are made of DSA window glass with a 3/16" insulating air space. They are available in 65 standard sizes, ranging up to a 38"x62" sheet.

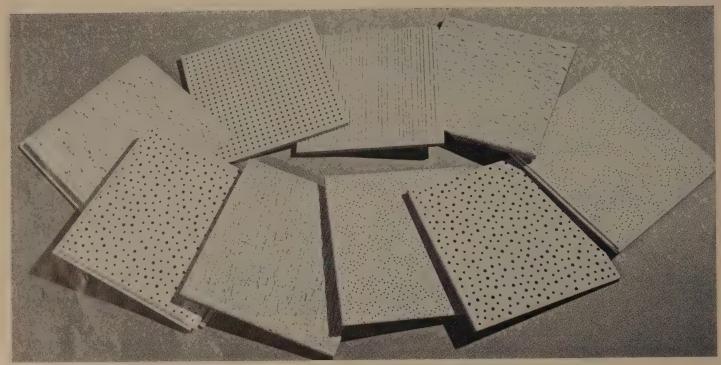
Libbey-Owens-Ford Glass, Toledo. For details, check No. 176 on coupon, p 236

Lustragray window glass contains a gray tint that is claimed to cut glare about 50% and significantly reduce heat transmission. It also gives privacy from outside while giving a clear view from within. Lustragray comes 3/16", 7/32", and 1/4" thick in sheets up to 6'x10'.

American-St Gobain Corp, Pittsburgh. For details, check No. 177 on coupon, p 236

CEILINGS

There are two big trends: more acoustical treatment and more luminous ceilings. Manufacturers are bringing out more decorative, less expensive wood-fiber tiles that can be flameproofed to meet Class C requirements, and where the ceiling must be fireproof, they are offering better looking fissured or perforated mineral tiles. Where ceilings are also light sources and ventilating media, plastic and metal eggcrates shield lamps and vents from the eye; roll and sheet plastics diffuse high-level illumination in bath or kitchen; and some ceilings are both luminous and acoustic.



NINE DIFFERENT TILE PATTERNS show the new variety offered by acoustical material manufacturers.

New acoustical tiles can help solve your noise problems

Full Armstrong line of acoustical materials includes metal pan, mineral wool, and wood fiber types. Three new Armstrong offerings are Golden and Silver Travertone, a fissured mineral tile with inlaid metallic files; Minatone, a mineral tile with small random perforations; Classic Cushiontone, a woodfiber tile with tiny perforations. Tiles are standard 12"x12"

Armstrong Cork, Lancaster, Pa. For details, check No. 178 on coupon, p 236 Nu-Wood's Micro-Perf, a new acoustical tile, has perforations so small they are almost invisible. Micro-Perf combines needle holes and a fissured pattern, is available in gray or beige. Also available from this company: regular and random perforated, matte finish, and fissured tiles. They can be applied to the furring strips with adhesive, clips, nails, staples or screws.

Wood Conversion Co, St Paul. For details, check No. 180 on coupon, p 236

Baldwin-Hill acoustical line now includes two new wood-fiber tiles. One new Claritone tile is regular perforated, the other has a random pattern. They come ½", ¾", or 1" thick in 12"x12", 12"x24", and 24"x24" sizes. They are finished with bevel butt or t&g joints for adhesive staple, nail, screw fastening, or kerfed and rabbeted for mechanical suspension.

Baldwin-Hill Co, Trenton. For details, check No. 182 on coupon, p 236

Kaiser's Fir-Tex tiles in a choice of two acoustical patterns will round out the company's line this year. One pattern is uniformly drilled, the other has random spacing of varying diameter holes. The tiles come in a wide range of sizes and thicknesses, from 12"x 12"x1/2" to 24"x48"x1". Joints can be butt or t&g. The tiles have white washable finishes, can be flame retarded.

Kaiser Gypsum, Oakland, Calif. For details, check No. 179 on coupon, p 236 Celotex adds two tiles to its full line of acoustical materials. Travertine is a fissured tile with a marble pattern overprinted on a linen-textured base; Beige Brocade is a sculptured white tile with an overprint of beige fabric. Both are 12"x12", have interlocking joints to conceal fasteners. Other Celotex lines include Hush-Tone perforated, True-White linen and sculptured.

Celotex Corp, Chicago.

For details, check No 181 on coupon, p 236

Wall and ceiling panels called Decrobord are the newest product from Johns-Manville. The wood-fiber board, available as 12"x12" tiles or 1'x8' planks, is finished in a variety of pastel colors, gold, silver, and white. The tile and plank are flame-retardant treated. They may be fastened to 1x3 furring strips with nails or staples with J-M's special tonguing system.

Johns-Manville, New York City. For details, check No. 183 on coupon, p 236 Vinylux luminous ceiling is made of light-weight corrugated plastic sheets hung on inverted aluminum T-bars. It conceals mechanical services but gives ready access to them (plastic is simply rolled back out of the way). Perforated panels are available where some acoustic treatment is needed. Standard width is 3534"; lengths 10', 25', 50', 100'.

is 3534"; lengths 10', 25', 50', 100'. Sealview Plastics, West Conshohocken, Pa.

For details, check No. 184 on coupon, p 236

Polarizing light panel designed to reduce glare in room is now going into production. Made of color-stable resin reinforced with Fiberglas flake (a new Owens-Corning product) the new panels are still considered too costly for wide use in homes, but the manufacturer hopes greater production will bring the price down. Current production is in flat sheets up to 24"x48".

Owens-Corning Fiberglas, Toledo. For details, check No. 185 on coupon, p 236

Aluminum ceiling louver by Columbia comes in wide variety of standard colors or any custom color. Openings in the louver are ½"x½"x½"; panels are made from .025" aluminum, come up to 48" long, up to 24" wide. Lighting fixtures are mounted above it.

Columbia Electric & Mfg, Spokane. For details, check No. 186 on coupon, p 236

Luminous acoustical ceiling, originally designed for commercial use, is now finding its way into homes. Perforated baffles filled with sound-deadening material are fastened to the channels that support the corrugated plastic ceiling. Noise reduction coefficients up to 40% are possible. The corrugated vinyl has a standard 35%" width for hanger spacing of 36". Flat acrylic panels and modular 2'x2' and 3'x3' panels are also available.

Luminous Ceilings Inc, Chicago. For details, check No. 187 on coupon, p 236

Big Insulite line includes Acoustilite tiles 12"x12" and 12"x24" in regular drilled and random drilled faces, and Fiberlite tiles 12"x12", 12"x24" and 16"x16" (½" or ¾" thick). In both tiles edge treatments include t&g, butt, and painted bevel.

Insulite, Minneapolis.

For details, check No. 188 on coupon, p 236

National Gypsum has two new incombustible acoustical tiles. Sculptured Travacoustic is mineral wool in a cement binder, 34" thick in 12"x12" tile. Acoustiroc is mineral fibers felted with a cement binder. Textured, striated, or random perforated surface finishes.

National Gypsum, Buffalo.

For details, check No. 189 on coupon, p 236

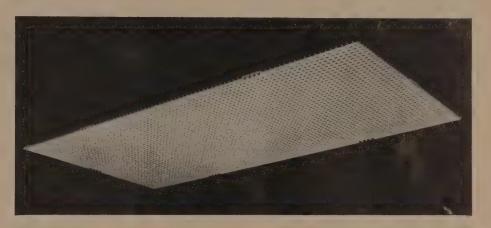


Ceiling coffers fit a 2'x2' module

This packaged luminous ceiling is shipped in two component parts: a metal channel containing all wiring and a coffered plastic diffuser. There are two standard packages—one 4'x6' with six duffusers (shown) and the other

4'x4' with four. Metal frame is finished in baked white enamel, diffusers are vinyl. Plastic side panels are available as an accessory.

John C. Virden Co. Cleveland. For details, check No. 190 on coupon, p 236



Plastic eggcrate diffuses light and air

Air can rise through it to a vent fan; light from fixtures above it is tinted and diffused; sound waves striking it are broken up. Louvers are made of heat-resistant plastic with low thermal expansion. Panel grid is ½"x½"x½"x,

panels come in standard sizes of 2'x2', 1'x4', and 2'x4'. Standard units lock in line to cover long runs or large areas. Five colors and white.

Sinko Mfg & Tool Co, Chicago. For details, check No. 191 on coupon, p 236



This acoustical ceiling is a roof deck

Acoustical treatments are available in a four-in-one deck that serves as roof, insulation, and ceiling finish. Shown above is the standard drilled pattern; also available, a fissured pattern. These deckings consist of ½" layers of as-

phalt-impregnated insulating board laminated with a water-resistant adhesive. Standard deck planks come 2'x8', and 1½", 2", or 3" thick.

Simpson Logging Co, Shelton Wash. For details, check No. 192 on coupon, p 236

EXTERIORS

From roof to sill new products are making possible better houses for less money. Now terne plate and galvanized steel are competing with aluminum (H&H, May '58) for the metal roof market. And asphalt roofing is licking the wind problem with new lock-tab and seal-tab shingles. More and more aluminum is going into enameled siding. More wood siding is coming presealed, plastic overlaid, prefinished. New and stronger wallboards give better one-product sheathing than conventional materials. And mill ends are combined into panels that do a better job than longer lengths of lumber.



New bevel siding is plastic overlaid, solid backed

Laminated bevel siding with a phenolic resin surface, a two-ply core, and solid beveled backing is new from Georgia Pacific. The plastic surface acts as a vapor barrier and prime coat. The

Celotex sheathing now gives superior nailholding for direct nailing of asbestos and wood shingles. The new sheathing exceeds FHA requirements for nailability. It also has been approved for application to the frame without corner bracing. Strong-Wall sheathing is ½" thick, and is available in 4'x8' and 4'x9' sheets.

Celotex Corp, Chicago.

For details, check No. 194 on coupon, p 236

Sandwich flashing is aluminum asphalt-bonded to creped kraft paper, reinforced with glass fibers. Chase Alum-O-Top is available in 2- and 4-mil grades. The 4-mil grade meets FHA and va requirements for concealed flashing and dampproofing. Standard widths from 4" to 48" in 120' rolls are available.

Chase Brass & Copper, Waterbury, Conn.

For details, check No. 196 on coupon, p 236

laminated core prevents splitting near the edge. The solid backing provides solid nailing. Back grooves offer an escape for condensation. All surfaces are factory-sealed with preservative.



L.O.F. glass insulation has a new stapling tab this year. The new tab is formed of two thicknesses of paper and one of foil to assure better moisture seal and make installation faster. This insulation is foil-faced on the interior side, open on the exterior.

LOF Glass Fibers Co, Toledo. For details, check No. 197 on coupon, p 236 The new siding is available in 12" and 16" widths, 8' long, is packed six or eight pieces per carton.

Georgia-Pacific, Portland, Ore. For details, check No. 193 on coupon, p 236

Simpson's overlaid plywood takes paint better, holds it longer, needs fewer coats to cover, the maker reports. It requires no sanding, scaling, or patching, is available with medium and high density surfaces. Medium density is recommended for siding, high density for concrete forms. The high-density type is exterior grade fir plywood which has plastic laminated to both faces in order to give the concrete a smooth finish.

Simpson Logging Co, Shelton, Wash. For details, check No. 195 on coupon, p 236

Co-Val plywood now comes treated with Plyform sealer to cut fiber sticking, hide grain pattern, and prevent showthrough. The new sealer will be applied to any grade on order. Panels are ready for finish painting as delivered.

Coquille Valley Lumber, Milwau-kie, Ore.

For details, check No. 198 on coupon, p 236

Vinyl-coated aluminum is used for Hastings' new siding. Because it is coated on both sides, no painting is necessary. The siding is of the lock-up type, has concealed weep holes, along the clapboard edge elongated nail holes, and pre-notched ends. Corners have a tight interlocking feature. A wide range of baked-on colors is available.

Hastings Aluminum Products, Hastings, Mich.

For details, check No. 199 on coupon, p 236

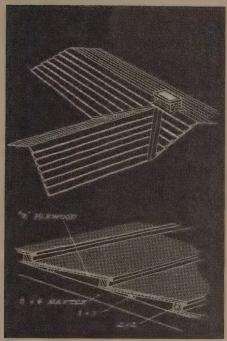
Carey asphalt shingles are now fire resistant. Fire-Chex shingles are made of asbestos fiber in asphalt and have a Class "A" fire rating. They measure 12"x36" and weigh 325 lb per square. The new shingles have two tabs, each 17¾" wide with a 5" exposure, come in 11 colors. Carey's Sta-Seal adhesive is factory applied. A heavier (400 lb per sq) shingle is also available.

Philip Carey Mfg Co, Cincinnati. For details, check No. 200 on coupon, p 236

Lock-on asphalt shingle by Certain-Teed is latest one on the market. Two small tabs at the bottom of each Lok-On shingle are tucked under the edges of adjoining shingles. Each Lok-On is then pulled up tight and nailed in place. They are available in ten colors. Also new from Certain-Teed, an insulating sheathing made of asphalt coated wood fibers. The 2'x8' boards have t&g edges.

Certain-Teed, Ardmore, Pa.

For details, check No. 201 on coupon, p 236



Roofs of terne plate revive a 200-yr old product in a new design. Tin-and-lead-plated steel as roofing is permanent, lightweight, strong, and has a low expansion. New uses include Bermuda roof (above), ribbed or batten roofs, standing or flat locked seam roofs.

Follansbee Steel, Follansbee, W. Va. For details, check No. 202 on coupon, p 236



Aluminum soffit vent comes in strips 8' long, 2½" wide, has stamped, louvered openings in banks of six the length of the strip. Strip vent has a special nailing section, goes in place like any other soffit material.

Leigh Building Products, Coopersville, Mich.

For details, check No. 205 on coupon, p 236



Here's a decorative steel shingle

This self-ventilating roofing is 28-gauge galvanized steel stamped to resemble tile. It is coated with a mastic and ceramic granules, in any combination of 35 colors, after it is installed. Inplace cost is claimed by the maker to

Loose insulation for concrete block cavities is being made by Zonolite. The vermiculite, specially treated to resist moisture penetration, is easily poured from the bag into block cores. Reductions up to 50% in heat transfer in masonry walls are possible, the maker claims. Zonolite also has glass fiber insulation with an improved tab.

Zonolite Co, Chicago.

For details, check No. 204 on coupon, p 236

Barretts' new roof board is sized to help seal the surface against pitch absorption. Because pitch is absorbed only at the surface, the rest of the board retains its insulating value. And less pitch is used on hot-mopped applications because it does not soak into the board. The new sized board is priced the same as Barrett's standard line.

Barrett, New York City.

For details, check No. 206 on coupon, p 236

compare with that of asphalt shingles. It weighs 120 lbs per sq, is nailed at the top of each sheet, held at the bottom with a metal clip.

McDowell Mfg Co, Pittsburgh.

For details, check No. 203 on coupon, p 236



Pre-primed Flexboard is ready for finish painting as soon as battens are applied. The asbestos-cement boards come in ½" and 3/16" sheets in sizes from 4' x 8' to 4' x 12'. Both thicknesses meet FHA specifications when applied over a continuous sheathing.

Johns-Manville, New York City. For details, check No. 207 on coupon, p 236

continued on p 220



This fireplace installs in four hours

Completely factory-built, the Vitroliner Open-Hearth has its own chimney, can be installed with no footings—flush against a wall—with unskilled labor. It is finished in black with brass trim and fire screen. A 2" firebrick lining protects the back of the firebox. It will burn coal, charcoal, and logs 30" long.

Condensation Engineering Corp, Chicago.

For details, check No. 208 on coupon, p 236



Superior Fireplace, Fullerton, Calif. For details, check No. 210 on coupon, p 236



110-volt barbeque-broiler is new in Stanthony's line. The unit is a "drop-in" type, fits any standard 18" base cabinet without special wiring or insulation. It cooks with an electric element and ceramic coals, includes a rotisserie. The grill can be raised, lowered, or tilted to remove grease. A hardboard top covers the unit when it is not in use.

Stanthony Corp, Los Angeles. For details, check No. 211 on coupon, p 236



How about a built-in charcoal oven?

Hasty-Bake has three different built-in units like the one above—all are new this year. Inside the stainless steel hood are two cooking levels and an electric rotisserie (an optional extra on the less expensive models). Firebox height can be adjusted with a crank operator.

Hasty-Bake Mfg Co, Tulsa.

For details, check No. 209 on coupon, p 236

New Lightolier fixtures have vivid color accents. "Gemfire" collection includes six different ceiling bowls, some inverted. There are matching wall bracket lights for all six. "Holiday" collection fixtures have opal glass globes set in colorful wire and mesh cages. An adjustable pendant model and two shallow models are available.

Lightolier, Jersey City, N.J. For details, check No. 212 on coupon, p 236

New Moe lighting fixtures include a three-light drop cluster with satin opal glass. It is 4½" in diameter, 15" long, with polished brass trim. Fashion-Favored Series also includes a matching pendant and three pulldowns.

Thomas Industries, Louisville.
For details, check No. 213 on coupon, p 236

Plastic glazing panes are newest product of Filon, West Coast manufacturer of reinforced plastic materials. The new shatterproof panes are available in clear or translucent plastic. Colors are green, jade, frost, clear.

Filon Plastics, El Segundo, Calif. For details, check No. 214 on coupon, p 236

New Markstone eyeball light for recessed ceiling installation is available in plain and louvered styles. It uses a 75-w lamp, can tilt 45° and swivel to any direction. The "Satel-Lite" comes unwired or wired, adjusts to any thickness of ceiling.

Markstone Mfg Co, Chicago.

For details, check No. 215 on coupon, p 236



Ventilating skylight that fits all standard roof pitches comes from Wasco, makes interior space usable for bathrooms. The Daylite Ventdome has an aluminum frame, a shatter-resistant acrylic dome (clear or translucent) and powered ventilation from its 8" 110-v fan. Self-closing aluminum louvers prevent drafts when fan is not in use.

Wasco Products, Cambridge, Mass. For details, check No. 216 on coupon, p 236

Powerful vent fan moves 1,100 cfm, can exhaust up to three separate intakes, has been used successfully with 62' of duct with five elbows and three intakes. The Kitchen-Aire unit mounts outside the house on wall or roof, connects by duct to kitchen, bath, etc.

Stewart Industries, Indianapolis.

For details, check No. 217 on coupon, p 236



Plastic drawers priced to compete with wood drawers are new with Washington Steel Products. Fronts to match wood-work are quickly attached on the job. Metal slides operate on nylon bearings. Drawers are formed of high-impact polystyrene in a neutral color. There are 20 different sizes available.

Washington Steel Prods, Tacoma. For details, check No. 218 on coupon, p 236

Eleven-station intercom has 5-tube AM-FM radio and timer clock that controls both radio and coffemaker. Any station can call any other station or converse with front door speaker, or monitor any other station. A record player can be attached.

Flush Wall Radio, Clearwater, Fla. For details, check No. 219 on coupon, p 236

Continuous skylights in widths up to 12' are now available from Van Noorden. The new units are glazed with translucent or clear corrugated plastic, mounted in aluminum frames, with or without curbs. Ceiling panels to close the well are also available.

E. Van Noorden Co, Boston. For details, check No. 220 on coupon, p 236

Automatic stairway by Precision is powered by a ½ hp electric motor. Pushbuttons at top and bottom of stairs operate it. Treads are 1"x8"x21½", covered with rubber. Stringers are 1½"x5½". Door panel is insulated. Rough ceiling opening required: 30" x72". Made for ceiling heights from 7'6" to 12'.

Precision Parts Corp, Nashville. For details, check No. 221 on coupon, p 236

Intercom with door chimes has been introduced by Music & Sound in a system that has a master unit and five satellite speakers. The door speaker has a two-way voice unit and door bell chime system works at all times.

Music & Sound Inc, Dallas.

For details, check No. 222 on coupon, p 236

The Bell System has a device for "some time in 1959" to allow communication between one or more telephones within a house and from any phone to speakers at front or back doors. Each extension phone can be equipped with speakers to permit "hands-free" operation. Also, Bell's new system will allow transfer of calls to another extension and holding of outside calls while talking to another inside phone.

Bell Telephone, New York City.
For details, check No. 223 on coupon, p 236

Five-station intercom with 6-tube AM-FM radio and timer clock is newest Talk-A-Radio model. The unit lets any speaker originate conversation and any room can answer door bell; baby's room may be monitored, and timer can turn radio on and start coffee-maker.

Talk-A-Radio Mfg Corp, Dallas.
For details, check No. 224 on coupon, p 236



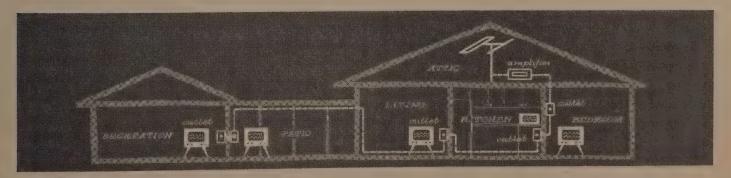
Factory-made built-ins come from Austin Industries, who also make Knoll-Drake plastic drawers. Shown above is a complete storage wall with hanging space, drawers, cabinets, and lavatory. Austin has had long experience in making built-ins for schools and motels, can turn out almost any kind and size.

Austin Industries, Austin, Tex.
For details, check No. 225 on coupon, p 236

Four-station intercom by Musicall offers AM-FM radio with 7 tubes in the master unit plus phono jack for playing hi-fi records. Three additional 5" remote speakers may be added. Any remote station may monitor any other station. Speakers have volume controls.

Musicall Corp, Los Angeles.

For details, check No. 226 on coupon, p 236



Antennas can be kept out of sight with new amplifier system

No unsightly antennas mar the looks of Builder Fred Dubin's new houses outside Philadelphia. Reason: they are equipped with Jerrold's new home antenna system which magnifiles both TV and FM signals so that aerials can be hidden in attics. Adapted from the company's master antenna system for

apartment houses, the home system provides high-fidelity reception from one antenna to any number of TV and FM sets. Installation is simple: the amplifier can be mounted within walls or in attics, basement or utility rooms. Antenna leads can run along baseboards, and press-on plugs can be lo-

cated in any room and require no soldering or wire stripping. (The system also provides better long-distance reception if aerials are put on roofs of houses far from stations.) Cost of system: \$67.75.

Jerrold Electronics, Philadelphia.
For details, check No. 227 on coupon, p 236

BUILDER WALTER TALLY of Doraville, Georgia, says: "This Comfort-Conditioned Home Program of Owens-Corning Fiberglas is the best cooperative merchandising program for the builder that we have encountered in all our experience. People who visit our models are already familiar with the program from excellent advertising in national magazines. We feel that our increased sales this year have been largely due to this fine program."

BUILDERS JACK KAYAND HAROLD GREENBURG of Silver Spring, Maryland, say: "The buying public is becoming more aware of the economy of heating resulting from Full Insulation. The Comfort-Conditioned Home Program is the perfect answer. We've had model home traffic of 50,000 this year and a large percentage came out solely because of our Comfort-Conditioned Home ads. Our salesmen are all sold on this program."





Message for promotion-minded home builders only:

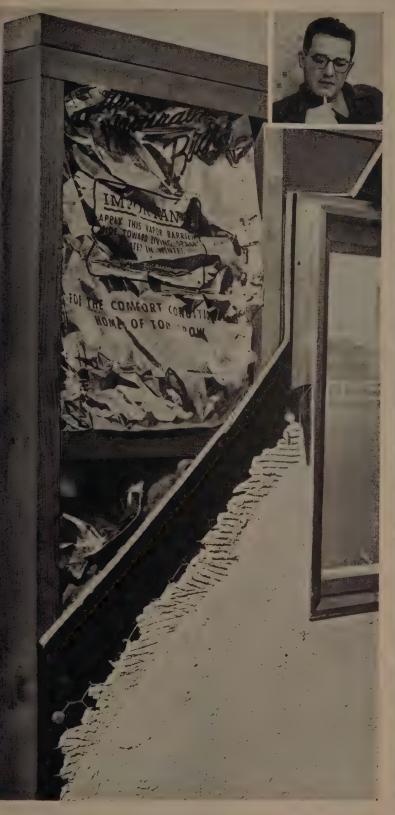
YOU BELONG IN AMERICA'S NO. 1

Here are the facts...Judge for yourself!

- This new merchandising idea—planned to help builders sell their way out of the 1957 housing slump—was thoroughly tested coast-to-coast in 1958 by 625 builders planning over 40,000 homes—far more than the original goal.
- Actual sales results reported by these builders demonstrate that people do want comfort, convenience and economy as basic features. (See examples above.)
- Participating builders say that Full Insulation and Full House-power—the two essentials of a Comfort-Conditioned Home—are solid-as-a-rock sales features that register as signs of quality construction. The program works best as a unifying selling theme.
- Builders report that month-after-month advertising in LIFE by Owens-Corning Fiberglas is building growing recognition among customers that the Comfort-Conditioned Home site sign is a symbol of quality. Heavy LIFE advertising will continue as the focus of this Comfort-Conditioned Home Program in 1959.

BUILDER DALE BELLAMAH of Albuquerque, New Mexico, says: "Our salesmen have found that this program is a terrific ice breaker. We display the LIFE ads in all our model homes. And we have a full-scale mock-up of wall construction with the insulation in place (shown below). Then as a clincher, we show a prospect through a home which has the Fiberglas Insulation in place. It's a real 'Cadillac' demonstration, I'll tell you."

BUILDER NORMAN BEKEMEYER of Wichita, Kansas, says: "The Comfort-Conditioned Home Program has definitely been a major factor in our sales. The comfort theme is ideally suited for tying in all parts of the house under one promotion banner. In fact, we have promotional tie-ins with five different companies, all under the Comfort-Conditioned Home theme."





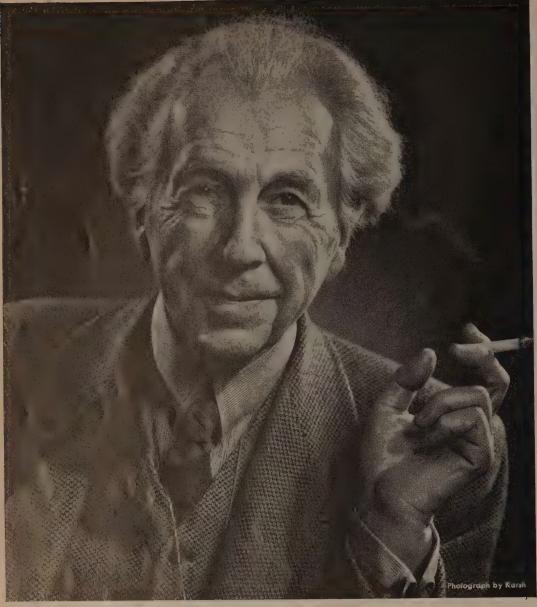
HOME-SELLING SUCCESS!

Home buying interest is sparked by model homes complete with such added or optional Comfort Conditioning features as modern kitchen appliances, Fiberglas* screened patios, Fiberglas acoustical ceilings and Fiberglas curtains and draperies.

The Comfort-Conditioned Home Program for 1959 is built on the foundation of success in '58. That's why its overwhelming success in this second year is virtually guaranteed. Drop us a letter or postcard and we'll be glad to give you complete details. Owens-Corning Fiberglas Corp., Dept. 67-A, Toledo 1, Ohio. Nothing succeeds like
America's no.1 selling success



eT-M. (Reg. U.S. Pat. Off.) O-C.F. Corp.



"I think the only effective photograph that can be made of architecture is three dimensional"

"In the kind of architecture I represent, it's the third dimension-depth-that gives it quality and effect. And stereo photography is the only way you can get that third dimension," says world-famous architect Frank Lloyd Wright.

"Now it is possible to get a photograph of a building that gives you a feeling of being in that building.'

Realism of Realist stereo-a strong sales aid. Regardless of what phase of construction you are in, Realist stereo can be a valuable sales tool.

The natural colors and depth of Realist stereo slides show buildings, remodeling or decorating handiwork with life-like realism-hold the undivided attention of prospective client or buyer.

A Realist stereo camera and hand viewer are all the equipment you need to put this effective sales aid to work for you.

To learn how Realist stereo can help you sell faster and with greater ease, fill in and mail the coupon below, today.

Slide duplicating-Realist, Inc. makes duplicate stereo and 35 mm. slides with amazing accuracy. Order 1 slide or 1,000 with the assurance each will be a clear-cut copy of the original. Mounted in cardboard, ready for viewing. New low prices to industry.

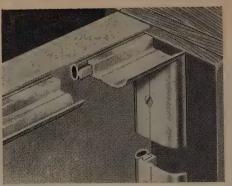


R.	0:	+
1/6	alı	AL [®]

Everything in stereo:camera, viewers, slide mounting, etc. A subsidiary of the David White Instrument Company,

Realist, Inc.-Dept. HH 2051 N. 19th St., Milwaukee 5, Wisc. Please send me free copy of Realist stereo 3D booklet

Address____



Air-tight door-stops, composed of aluminum sections with flexible vinyl inserts have been introduced by Air-Tite. The vinyl provides a continuous seal impervious to weather or climatic change, eliminates drafts and loud door-slamming. Contoured jamb sections are 7' long, top sections are 3' wide for exterior entrances, and are coped at the end to make rightand left-hand jambs. This set for outside doors retails for \$6.60. Another for storm doors, casement windows, etc sells

Air-Tite Products Inc, South Bend, Ind. For details, check No. 228 on coupon, p 236



Olive knuckle hinges introduced by Soss combine the attractiveness of olive knuckle design and the low-cost, easyinstallation features of butt hinges. Doors mounted on the new hinges can be removed when open without taking out pins or screws, yet when closed cannot be removed and so are burglar-proof. Hinge pins rotate in a nylon brushing, eliminating need for oiling. They are available for right- or left-hand door openings for either

13/8" or 13/4" doors. Soss Mfg Co, Detroit.

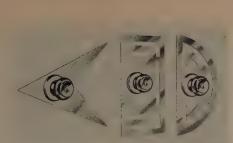
For details, check No. 229 on coupon, p 236



Door safety hinge offered by Griffin protects outward swinging doors against tampering and removal by use of a hardened steel ball that locks the pin in position when door is closed. The ball, permanently set in the barrel, automatically resets when door is closed even if pin has a tendency to rise when the door opens. The hinge butt is available in standard finishes and on all ball-bearing butts and template hinges 4" and larger.

Griffin Mfg Co, Erie, Pa.

For details, check No. 230 on coupon, p 236



New escutcheons are two of several offered by Weiser. These designs are made from solid brass or bronze and available in a variety of finishes. The escutcheons fit any 5" backset lock. In-The stallation is quick, consists merely of clamping escutcheon to door permanently by tightening the lock to the door.

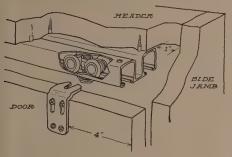
Weiser Co, South Gate, Calif.

For details, check No. 231 on coupon, p 236



Extension flush bolts in larger sizes—face plates 634" x 1" and 634" x 114"—have been added to Ives' line. Available with both wood and machine screws, the bolts have a delayed action and provide a 40° finger-grip space before the feather-touch lever snaps the bolt flush automatically. Both bolts have 1/2" square heads. Rods are backset 5/8'

H. B. Ives Co, New Haven. For details, check No. 232 on coupon, p 236



Snap-on sliding doors are possible with a new hanger device designed by Kennatrack for by-passing door installations. A new system of hanger plate attachments permits the door to be snapped out easily for cleaning and other purposes without disturbing the adjustment on the hanger track or removing center guide at floor.

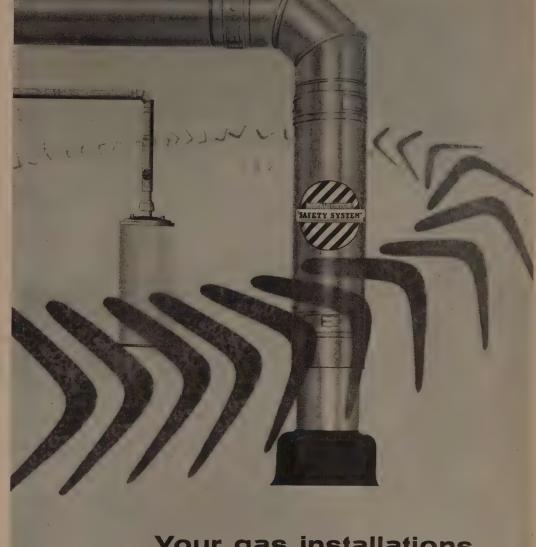
Kennatrack Corp, Elkhart, Ind. For details, check No. 233 on coupon, p 236



Drawer slides on nylon rollers have been introduced by Amerock in standard lengths of 18", 20", 22" and 24". Graphite-treated rollers provide quiet action, permit slide to carry 50-lb load over zinc-plated steel track. A stop prevents the drawer from falling out. Each slide is fastened with only four screws and is self-aligning. Side mounting is standard, but an attachment permits end mounting.

Amerock Corp, Rockford, Ill.

For details, check No. 234 on coupon, p 236



Your gas installations

can't boomerang... with this seal!



Gas vent failures can "boomerang" back to harm your quality reputation as a builder

... when polluted, stale air and condensation damage appear in the homes you've sold.

The Metalbestos "Safety Seal" is your protection against gas vent failures and customer complaints... because it means that an all-Metalbestos vent has been installed according to the scientifically developed Metalbestos "Safety System" Gas Vent Tables.

Learn why the new Metalbestos "Safety System" lowers vent installation cost...meets every gas vent problem. Write Dept. D-1.

Stocked by principal distributors in major cities. Factory warehouses in Akron, Atlanta, Dallas, Des Moines, Chicago, New Orleans, Los Angeles, Woodbridge, N. J.



WILLIAM WALLACE COMPANY - BELMONT, CALIF.

THIS IS THE PANEL OF EXPERTS



 Builders, decorators, architects stand behind Barclite...the amazing fiberglass panel that's so easy to handle.

Delicately-patterned translucent fiberglass lends itself to any number of decorative treatments that add custom-design appeal on even your smallest budget. Barclite Decorative Panels are lightweight and so flexible they install with ordinary hand tools in a flash! Unbelievably low in cost, Barclite is used hundreds of ways...as room dividers, sliding doors, dropped ceilings, skylights...in homes, offices, restaurants, stores, beauty shops—anywhere!

See Barclite at your nearest lumber dealer or write for free color literature and samples of this unique new product.

BARCLITE CORPORATION OF AMERICA*, Dept. HH-1, Barclay Building, New York 51, N. Y. *AN AFFILIATE OF BARCLAY MANUFACTURING CO., INC.

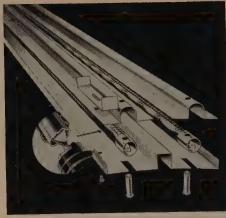






BARCLITE

New products



New Unique balances provide fulljamb weatherstripping and can be installed at low cost for any stock frame up to 6'6" high where sash are properly grooved. Only four drive screws are needed for the installation; balances are pre-adjusted at the factory. The new balance fits sash weighing up to 30 lbs and with sill pitch of 10°, 12°, and 14°.

Unique Balance Co, Stamford, Conn. For details, check No. 235 on coupon, p 236



Three-section slide announced by Grant Pulley will support 150 lb in a fully extended position. This Model 325 is available in even lengths from 12" to 30". The three members are interchangeable, eliminating costly hand fitting of each slide. The zinc-plated slides have three ball-bearing rollers plus one free-floating roller for self-adjustment. Mounting requires only 34" space at each side.

Grant Pulley & Hardware Corp, West Nyack, NY.

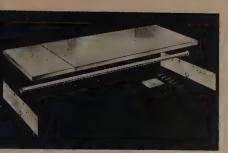
For details, check No. 236 on coupon, p 236



An outdoor elevator is sparing some San Franciscans who live on steep hill-sides a great deal of hard climbing. These home owners can ride diagonally up and down to street levels on Hil-a-vators, outdoor passenger hill-climbers similar to the city's famed cable cars. The cars work on push-button controls.

Dwan & Co, San Francisco.

For details, check No. 237 on coupon, p 236



Expanding shelves offered by Home Comfort fit almost any clothes or ward-robe closets from 23½" to 84½" wide. The precision-made telescoping metal shelves can be loaded to 30 lb a lineal foot. They come with or without clothes pole. Easy to install in five minutes, they

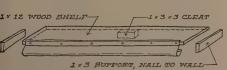
are said to cut labor costs 80%.

Home Comfort Mfg Co, Peoria, Ill. For details, check No. 238 on coupon, p 236



Shelf and rod bracket introduced by Kees is a dual purpose metal bracket that both supports a closet shelf and provides a hanger rod. The embossed steel brack-ets are 10" high, 11" wide, and will sup-port shelves 14" deep. They are packed 12 to an 18-lb carton with screws needed. A center bracket is recommended for extra long shelves or rods supporting heavy loads. F. D. Kees Mfg Co, Beatrice, Neb.

For details, check No. 239 on coupon, p 235



Clothes hanger bars offered by Slimfold consist of 6', 7' and 8' lengths of curved metal strip nailed to wood shelving so as to reinforce ordinary closet shelves and serve as a rod to hang clothes. The bars can be cut to fit any closet width.

American Steel Door Co, Detroit.

For details, check No. 240 on coupon, p 236

Plastic-coated screening by New York Wire is reportedly strongly resistant to salt-air or other corrosion that may affect metal insect screening. A vinyl coat is applied to aluminum core wires before weaving. The transparent plastic does not change the color of the aluminum. Added advantage: Vinalume screens do not collect static electricity, thus little dust collects on the screen. A 2'-wide, 50'-long section weighs only 5 lb. Other lengths are available

New York Wire Cloth Co, York, Pa. For details, check No. 241 on coupon, p 236



The new McQuay Package Chimney is the finest. It tests better because it is built better-by McQuay, with more than a third of a century of heating experience—and is easier and faster to install. Compare McQuay quality, compare erection time and costs, compare McQuay advantages. Then you'll see why the new McQuay Package Chimney excels in every way. See your jobber or write McQuay, Inc., 1608 Broadway Street N.E., Minneapolis 13, Minnesota.



Starter Box and Starter Section in one unit for fast erection. Interliner and stainless steel flue supported by exclusive McQuay stainless steel and aluminized steel tension spring spacers. Permits quick drafts and even temperature top to bottom for peak efficiency under steady or intermittent firing.

Check these features against those of any other chimney!

- Stainless steel flue Handles all fuels Light weight Strong
- and durable Long life Baked on finish Quick installation
- Low installation costs Competitively priced • Safe — U.L. approved







AIR CONDITIONING . HEATING . REFRIGERATION



Ways you can

SELL MORE HOMES

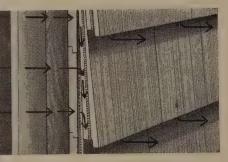
using Shake-a-Ply cedar siding

FAST APPLICATION—It takes only about 12 man-hours to apply 1000 sq. ft. of Shake-a-Ply. The easy-to-handle panels can be sawed in any direction or nailed anywhere without splitting or checking. No special nailing strips or backing necessary.



MITRED CORNERS, made from Shake-a-Ply panels, save the cost of fitting corner joints, and help establish correct spacing and chalk line for panels. Like Shake-a-Ply panels, they are machine-made to square, uniform dimensions.

NO PAINT FAILURE with Shake-a-Ply because its resin-coated moisture barrier prevents formation blisters. Shake-a-Ply comes either natural or brush-painted at the factory in primer or 12 colors.

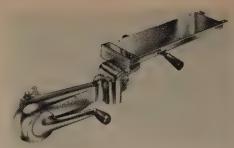




MORE "VISIBLE" QUALITY because the home buyer can actually see and touch the cedar shakes. Shake-a-Ply has an expensive quality look, but the installed cost of these factory assembled units is less than any other wood siding.

Shake-a-Ply panels are 8 feet long by nominal 18 inches wide. They are made like plywood, using No. 1 clear machine-grooved Certigrade Western Red cedar shakes and cedar shingle undercoursing, with a cross-bind of veneer core coated with waterproof resin.



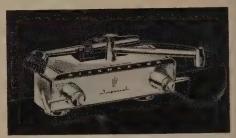


Two appliance mountings for such kitchen items as can openers, coffee mills, meat grinders and juicers have been added to the Kitcheneer line. The under-the-cabinet units include one in satin aluminum enamel with chrome trim which fits any wood cabinet and locks the appliance either at front or out of sight at rear. Price: \$4.95. The other, priced at \$7.95, fits either wood or metal cabinets, locks in any of four positions, and comes either in plated chrome or copper.

Kitcheneering Co of America, Kansas

City, Mo.

For details, check No. 242 on coupon, p 236



Dishmaster has made the first model changes in its faucet dishwasher in 12 years. The water-operated appliance now holds enough detergent for two days of dishwashing. One model mounts on the deck of any size sink, another mounts against the wall behind the sink. A flick of a button releases suds for washing and scraping, another flick sprays clear water for rinsing. Price \$49.50.

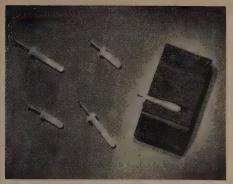
Dishmaster Corp, Pontiac, Mich.

For details, check No. 243 on coupon, p 236



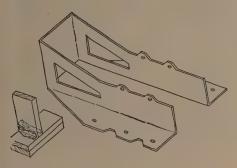
Dumbwaiter by Flinchbaugh/Murray is the newest addition to household appliances. It is pushbutton controlled to serve houses with two or three levels. F/M's \$580 Butler Jr. fits into the base cabinets in kitchens (it is 33" wide and 24" deep) or at any other level. It can lift 200 lbs at 25' a minute, has safety controls. Suggested uses: to carry linen to and from basement laundries, refreshments to basement recreation rooms, food from garage level to kitchen above.

Flinchbaugh/Murray Corp, York, Pa. For details, check No. 244 on coupon, p 236



Tap-on nylon anchor by Partridge reportedly can "secure everything to anything." The anchor of tough nylon comes with an expansion pin inserted, and installation merely requires a tap on the head of the pin after it is inserted in a drilled hole. This forces the serrated jaws on the anchor to expand firmly against the walls of the hole. Nylon makes the anchors impervious to atmospheric changes, rust, and other factors. The anchors are 3/16"x1", 1/4"x1" and 1/4"x11/2".

Partridge Products, Hialeah, Fla. For details, check No. 245 on coupon, p 236



U-type joist hangers for 2x6 to 2x14 wood joists have been developed by Teco to eliminate ledger stripping, joist notching, and bulky strap hangers. The 16-and 18-gauge zinc-coated steel hangers are nailed on both the joists and headers, can be used with 2" or 4" lumber.

Timber Engineering Co, Washington, D.C.

For details, check No. 246 on coupon, p 236



Structural pipe fittings have been added by Hollaender to its Speed-Rail line to make angle railing construction easier and faster. Adjustable tees and flanges of aluminum alloy swivel 180° for use with stairway railings and angled braces and supports. No threading or welding is involved. Similar fixed and adjustable fittings are now also available in the heavy-duty Nu-Rail line for scaffolding and material racks.

Hollaender Mfg Co, Cincinnati.

For details, check No. 247 on coupon, p 236

continued on p 230



Wm. F. Bernbrock, residence, Moline, Ill., architect and owner used 22 Rilco laminated wood beams 5' o.c.

Architect-Owner Says:

"Happy 9 Chose



"... the simple, framing of the roof, the saving in time of erection, and the appearance of the beams ... all worked to our advantage. Because of the many favorable comments I have received on our home, particularly the exposed laminated beams. I am happy that I chose RILCO" says architect and owner William F. Bernbrock.

RILCO speeds completion, saves time and money "... all of the 22 beams were set by a truck crane in one and one-half days—most people observing the work could not help but comment on the speed with which the area was covered." Area covered was 3,800 square feet, beams were from 10' to 50' 6" long.

RILCO members require little if any maintenance—resist warping, splitting, cracking and withstand great temporary overloads without permanent damage. Their beauty increases with age.

Complete freedom of design, plus precision engineering of the finished wood members for easy, economical construction are important reasons for the constantly increasing preference for RILCO. For homes, churches, schools, industrial and commercial building—RILCO is your assurance of building better for less. For more information write your nearest RILCO office.



See our exhibit at the NAHB Show Space #537, Sherman Hotel

RILCO LAMINATED PRODUCTS, INC.

W 843 First National Bank Building Saint Paul 1, Minnesota

District offices: Newark, N. J. • Fort Wayne, Ind. • Tacoma, Wash.



Mr. Builder..for 1 home or 10,000 THERE'S A YEOMANS LOW-COST SEWAGE TREATMENT SYSTEM



For SINGLE Homes CAVITETTE® Miniature "City Type" System



For 10 or MORE Homes CAVITATOR® Full Scale "City Type" Plant

Easier to Finance at Prime Rates Because They Are Fully Approved

- 1 Banishes septic tanks.
- 2 Eliminates health hazards.
- 3 Opens up low-cost land.
- 4 Qualifies for federally insured home
- 5 Increases loan value of homes.
- 6 No unpleasant odors, no clogging, no backup.
- 7 Handles waste from garbage disposers, detergents from automatic washers, ALL modern home appliances.
- 8 New selling feature for countryside homes gives faster turnover at better price.
- 9 Service policy with dealers prevents call backs.
- 10 Operates in all climates.
- 11 Installs fast.
- 12 Models for all home sizes.
- 13 Completely warranted by manufacturer and installer.
- 14 Nationwide sales and service network.

- 1 Builders find that original cost of Cavitator community systems is up to 40% less than for individual septic tanks.
- 2 With community systems, local governments often permit builders to use smaller lots . . . thus more houses share original cost of the system.
- 3 Community systems improve the value of homes (both to owner and lender) . . . make them easier to sell.
- 4 Plants are small . . . can easily be camouflaged to look like a home.
- Factory engineer supervises installation, trains operator, tests performance.

PREFABRICATED PLANTS AVAILABLE FOR SMALLER SUBDIVISIONS

- 1 Packaged . . . shipped as a complete plant ready to lower into place.
- 2 Easy, low-cost installation requires only simple excavation and concrete slab.
- 3 Goes in fast, starts up fast.
- Factory assembly offers the lowest cost way to provide this type of treatment by reducing engineering and on-site construction time.

Cavitette® and Cavitator® are registered Yeomans trademarks

YEOMANS

Specialists for 60 Years in Sewage Handling

2003-8 N. Ruby Street, Melrose Park, Illinois



ALL YOU NEED TO KNOW ON HOME SEWAGE DISPOSAL

DISPOSAL

Published especially for builders, this fast-reading booklet gives the solution to any problem you might meet in home sewage disposal. Covers single-home systems, central plants, temporary facilities, connection to municipal lines, different types of terrain, lift stations, and health considerations for one to 1500 homes. Not technicall Forty pages, full of helpful illustrations. Fill out this coupon for your free copy of "The Homebuilder's Guide to Effective Sewage Disposal."

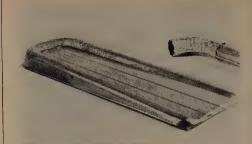
Yeomans Brothers Co.

2003-8 N. Ruby St., Melrose Park, III. (Suburb of Chicago)

Name		
Title or Business		
Company		
Street		
City	Zone	State
No. of Homes Planned		

TG-5805

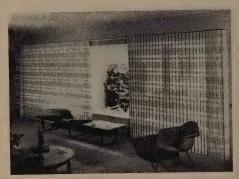
New products



Splash block made of galvanized steel has been introduced by New Monarch. A zinc coating assures corrosion resistance and long life. Advantages claimed: the 10-lb steel blocks will not chip and crack as concrete block may, and are easily moved to permit weeding or mowing. The blocks fit well with commonly used galvanized gutters and downspouts.

New Monarch Machine & Stamping Co,

For details, check No. 248 on coupon, p 236



Aluminum draperies loomed in reeds like colorful yarns and threads are available from Hunter Douglas as traverse draperies, as room dividers, or as roll shades (cord-and-pulley or spring-roller type). The aluminum reeds are made of a special alloy with a baked enamel finish and will not fade, warp, split or mildew. Six colors are offered.

Hunter Douglas Aluminum Corp, Riverside, Calif.

For details, check No. 249 on coupon, p 236



Welded pipe fittings made of A106 Grade B seamless carbon steel tube are now available from Nibco. They are designed for normal 150-lb use but have withstood 7,500 psi before cracking. The line includes straight and reducing tees, 45° and 90° elbows and 2" through 6" concentric reducers. Rough-in dimensions are the same as nominal sizes, ie, a 3" tee is 3" center to end.

Nibco Inc, Elkhart, Ind.

For details, check No. 250 on coupon, p 236



New Crane water heaters are gasfired, glass-lined, and come in 30-, 40-, and 50-gallon sizes. Circular burner has slotted ports to get efficient flame shape; air for combustion is fed from the top to keep out drafts, keep in heat. Pilot light safety shuts off gas if pilot goes out. Can be adapted to all kinds of gas. 15 year guarantee.

Crane Co, Chicago.

For details, check No. 251 on coupon, p 236



New water-heater line is now being offered by H. C. Little, makers of Safti-Vent gas space heaters. The new water heaters have efficient heat transfer from the offset flue and internal baffling which direct heat to sides of flue chamber. Galvanized and glass-lined tanks of 20 to 100 gallon capacity are included in the new line.

H. C. Little Burner Co, San Rafael, Calif.

For details, check No. 252 on coupon, p 236

Holland water heaters are oil-fired, glass-lined, 30-gal capacity. Rapid recovery rate is claimed to allow efficient use of small tank. Furnace type burner uses household fuel oil, operates automatically with electric ignition, is UL approved. Burner is out front, accessible for easy servicing.

Holland Furnace Co, Holland, Mich. For details, check No. 253 on coupon, p 236

New fire-retardant called Snuf-flame can make any paint less flammable. The product reportedly gives any coating it is mixed with "a flame-spread rating as low as 5, a rating never before achieved by any other fire-retardant," the maker claims. It does not affect paint color, ease of application, or life of finish coats.

Flame Control Products Co, Kansas

City, Mo.

For details, check No. 254 on coupon, p 236



ONLY Fleetlite Sliding Glass Doors HAVE PASSED THIS TEST! 100 mph. winds and heavy rains stopped by water barrier threshold

Before you select a sliding glass door, ask the question, "will it protect costly rugs and hardwood floors from water damage in pouring rain and high winds?" The answer is YES when you specify Fleetlite. These doors give protection in a man-made hurricane of 100 mph. with a 2" per hour downpour. No other door has ever passed this test. The Fleetlite exclusive "water barrier" double threshold and double weather seal block winds and water... provide automatic drainage so water cannot build up from the outside. Fleetlite Sliding Glass Doors are quickly installed, easily adjusted and are maintenance free. Write today for literature and complete information.



FLEET OF AMERICA, INC. Dept. HH-19, 2015 Walden Ave., Buffalo, N.Y.



Above: Cross section of Fleetlite double threshold that blocks wind and water.

Below: Fleetlite flat threshold is recommended only for interior sliding door installations where weather is no problem.





TERCHANGEABLE

GAS and **ELECTRIC BUILT-INS**

For 1959 are All New!

NEW Giant 18-inch ovens designed to fit in the standard 24-inch oven cabinets.

NEW The only 18-inch gas oven without the vent opening in the instrument panel.

NEW Big electric double oven...giant 18-inch oven with an economysize 16-inch oven underneath!

NEW 21-inch... gas or electric...space-saving units!

16-inch gas or electric 2-burner drop-in units.



Win a Free Trip for Two to NASSAU

Get details at our 2 booths at the NAHB Show - No. 780 at the Coliseum and No. 239 at the Hilton.

TENNESSEE STOVE WORKS CHATTANOOGA 1, TENNESSEE

Publications

Slide film on hinges

Stanley Hardware now has a slide film on hinges for hardware consultants and architects. It runs about 30 minutes, in full color, and has visual instruction on how to use a hinge selector guide and template for the final selection of hinges.

Stanley Hardware, New Britain, Conn. For showing, write direct to manufacturer.

Sliding glass door guide

Miller's catalog on two aluminum lines of single- and double-glazed doors includes a half-size detail sheet (which is perforated to permit easy removal for architectural tracing) containing specifying data.

Miller Sliding Glass Door Co, Burbank,

For copy, check No. 255 on coupon, p 236

Specs for sliding glass doors

An 8-page catalog by Slide-View lists features, detail drawings and specifications of its seven lines of aluminum and steel sliding glass doors with both single and double glazing. Full-color illustrations.

Slide-View Door & Window Co, El Monte, Calif.

For copy, check No. 256 on coupon, p 236

Removable windows described

A 4-page two-color brochure by Silcrest gives the specifications, installation details, and rough openings for 24 sizes of its Slideby removable window units (five are Lu-Re-Co sizes).

Silcrest Co, Wausau, Wis.

For copy, check No. 257 on coupon, p 236

Wood windows cataloged

Curtis has issued a 40-page two-color catalog listing the advantages and specifications of its several lines of wood windows. There are photographs, detail drawings, and complete descriptions of the type of wood, weather stripping, glazing, hardware, and other features offered.

Curtis Companies, Clinton, Iowa. For copy, check No. 258 on coupon, p 236

Screens and storm sash guide

American Screen has issued a 4-page bulletin describing its aluminum screen and storm sash components, as well as related items like patio, pool, and porch enclosures, screen doors, and hardware.

American Screen Prods, Northlake, Ill. For copy, check No. 259 on coupon, p 236

Specs for aluminum windows

Textron has published a 16-page catalog with full installation details for its many fixed, double- and single-hung, and sliding aluminum windows, both single and double glazed.

Textron Metals Co, Girard, Ohio. For copy, check No. 260 on coupon, p 236

Comic book on wood windows

An amusing 16-page full-color booklet on removable wood windows has been produced by R.O.W. using comic strip panels to explain the advantages of its new line of removable windows.

R.O.W. Sales Co, Ferndale, Mich. For copy, check No. 261 on coupon, p 236



... An Amazing MULTI-POSITION VENTILATOR with the AUTOMATIC Weatherlok SHUTTER Solves any installa-tion problem that arises.

Now it is possible to correctly locate a fan for maximum efficiency.

Easily Installs in Walls, Ceilings, Soffits or Cabinets. (SP) UL and CSA approved

PLUS RANGE HOODS in 3 Push-button Controlled Series



The 1500 Series

Features the "New Look" in contemporary design, engineered to Ventrola's famous standards of beauty, performance and dependability.

Factory installed fan housing. Unit completely pre-wired
...ready to install, Includes
CONCEALED LIGHT FIXTURE,
PUSH-BUTTON CONTROLS, FILTER and REDUCER WITH POSITIVE BACK-DRAFT SHUTTERS.

1600 Series Twin blower ronge hood ventilator

1400 Series Solid top honds

"AS REFRESHING AS THE GREAT OUTDOORS"

products of VENTROLA MANUFACTURING COMPANY OWOSSO, MICHIGAN

Write for COMPLETE Information

VISIT OUR BOOTH 925 at the NAHB SHOW See our BRAND NEW Bathroom Combination HEATER, LIGHT & VENTILATING FAN—and a completely NEW BUDGET LINE of Ventilating Fans... the "VENAIRE" Builders' Models in addition to Ventrola Ventilators and Range Hoods.

Publications

Aluminum screens and grilles

This 4-page brochure explains how any architect's design for "carved" aluminum screens and grilles—for sun control, room dividers, patio walls, etc—can be produced in exact sizes and colors ordered. Kurtzon lists size ranges, shows some patterns offered.

Morris Kurtzon Inc, Chicago. For copy, check No. 262 on coupon, p 236

Plumbing fittings cataloged

Royal Brass has published a 44-page catalog of its complete line of bath, shower and lavatory valves, drains and fittings, laundry tray faucets, etc.

Royal Brass Mfg Co, Cleveland. For copy, check No. 263 on coupon, p 236

Laminated plastics guide

Farlite has issued a new catalog showing 65 of its high-pressure laminated plastics in full-color, with additional information on grades, finishes, types (as sheets, panels, tops, and fabricated parts), uses, and specifications.

Farley & Loetscher, Dubuque, Iowa. For copy, check No. 264 on coupon, p 236

Vinyl and rubber tile guide

Amtico has issued a full-color, 8-page brochure illustrating both its vinyl and rubber flooring lines. All 180 designs and colors in the lines are shown, and all pertinent specifications are given.

American Biltrite Rubber, Trenton N.J. For copy, check No. 265 on coupon, p 236

Slide film on redwood

"Redwood Roundtable," a 20-minute color slide film, has been prepared for trade and consumer showings by Simpson, to show how redwood is logged and graded for various uses.

Simpson Redwood Co, Arcata, Calif. For showing, write direct to manufacturer.

More uses for redwood

California Redwood Assn has prepared two new color booklets for builders and architects. "The Sign of Fine Redwood" covers redwood properties, uses, yard grades, patterns, finishes, and specifications. "Redwood Siding" presents several design ideas.

Calif. Redwood Assn, San Francisco. For copy, check No. 266 on coupon, p 236

Fiberglas roof insulation guide

A two-color, 8-page brochure describing and illustrating Fiberglas roof insulation has been published by Owens-Corning. The brochure gives considerable data on thermal efficiency of different types of roof decks.

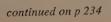
Owens-Corning, Toledo.

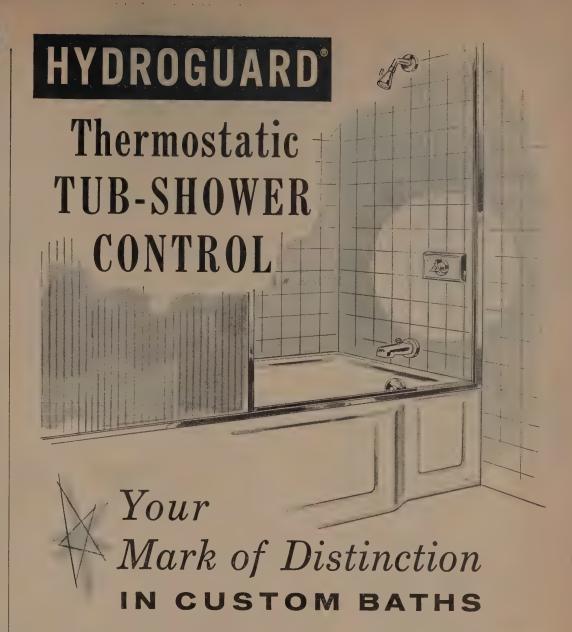
For copy, check No. 267 on coupon, p 236

Guide to power tools

Fourteen portable electric tools are described in a 12-page guide prepared by Porter-Cable. Saws, sanders, drills, routers, and garden equipment are pictured and their specifications listed.

Porter-Cable Machine, Syracuse, N.Y. For copy, check No. 268 on coupon, p 236





A single, smartly styled control sets the Hydroguard tub-shower combination apart from all others. Conveniently located at the entrance side of the tub — and so simple to operate — Hydroguard is the symbol of bathing comfort. A twist of the dial brings the desired water temperature . . .



never too hot, because of the safety limit . . . always the same, because of the thermostatic control. The Hydroguard bath is completely independent of other running water, hot or cold. It never varies from the "just right", relaxing and safe temperature selected by the bather.

When that selective family asks about bath accessories, make sure you tell them about Hydroguard — the safest choice for custom style and comfort. Get complete details. Fill out and mail coupon.

POW	ERS
-----	-----

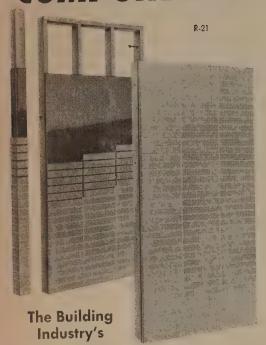
SPECIALISTS IN
THERMOSTATIC CONTROL
SINCE 1891

The Powers Regulator Company Dept. 159, Skokie 20, Illinois I would like specific information about the Hydroguard Thermostatic Tub-Shower Control.
Name
Title
Address

DUALIT

REDIBRIK*

MASONRY COMPONENTS



MOST DRAMATIC ADVANCEMENT IN DECADES

- Studding, insulation board, and masonry are assembled into a strong, rigid, easy-to-handle 4' x 8' component. 4 x 4" corners to match.
- A practical compromise between individual construction and total prefabrication.
- Bring to home builders the prestige, beauty and long-life values of modern masonry at costs little, if any, more than those of good frame.
- Factory fabrication enables rigid control of quality, and slashes the cost of on-site erection.
- Basically aims to conserve the interests of local building contractors by making them the key figures in the Redibrik sales program.

Redibrik—which makes possible masonry components—is a new thin masonry of modular dimensions. Range of 14 colors. Made on the patented Redibrik machine by regional manufacturers operating in protected territories. Choice territories open. Write for literature and factual information.

REDIBRIK INDUSTRIES, INC., 659 Ottawa Ave., Holland, Mich.

See Exhibit at N.A.H.B. Convention. Space 944 Chicago Coliseum



Publications

Guide to flexible connectors

Bronze metal flexible connectors can be used to solve all kinds of fitting problems, as shown in Cobra's new 16-page catalog. It lists hundreds of types and sizes for use in wet heat systems, water pumping, gas connections, kitchen and laundry appliance connections, etc.

Cobra Metal Hose Co, Chicago. For copy, check No. 269 on coupon, p 236

Colored range hoods

Emerson-Pryne has published a full-color 8-page booklet showing how its stainless steel "color coordinated" hoods match colored appliances of major manufacturers. Specifications are given for all its hoods and accessories.

Emerson-Pryne Co, Pomona, Calif. For copy, check No. 270 on coupon, p 236

Specs on steel sinks

Well over 100 stainless steel sinks and drainboards are pictured and diagrammed in Zeigler-Harris' new catalog.

Zeigler-Harris & Co, Burbank, Calif. For copy, check No. 271 on coupon, p 236

Facts on Lp-gas appliances

Here's a 24-page booklet describing appliances using Lp-gas. Among them are ranges, water heaters, dryers, furnaces, incinerators, and refrigerators. A reference map shows what size Lp-gas tank is needed for homes in all geographical zones.

National Lp-Gas Council, Chicago. For copy, check No. 272 on coupon, p 236

Lightolier's builder fixtures

Latest catalog from Lightolier features moderately priced lighting fixtures that offer up-to-date styling for all parts of your house. Catalog includes: door lights, hall lights, living area drop lights, bubble lights, close-to-ceiling fixtures, and flushmounted bath and kitchen fixtures.

Lightolier, Jersey City.

For copy, check No. 273 on coupon, p 236

A full line for home lighting

Seventy-two full-color pages on all sorts of lighting fixtures for the home are contained in Progress' current catalog. Illustrations and sizes are given for wall and ceiling fixtures, outdoor lanterns and lamp posts, door chimes, push buttons, range hoods, fans, bed lamps, etc.

Progress Mfg Co, Philadelphia.
For copy, check No. 274 on coupon, p 236

Guide to lanterns

Artolier has prepared an 8-page brochure picturing its line of post, coach, scroll, bracket, and ceiling lanterns for indoor or outdoor locations. Sizes, finishes, and construction details are indicated.

Artolier Corp, Lodi, N.J.

For copy, check No. 275 on coupon, p 236

Ceramic tile adhesive described

A 4-page illustrated catalog by 3M gives performance data and properties of its water-dispersed ceramic tile adhesive, CTA-50, used for wall-tile installation.

Minnesota Mining & Mfg, Detroit. For copy, check No. 276 on coupon, p 236 Reservation dates

4/c & Cover Feb. 12 B & W & 2/c Feb. 1

THE MODEL HON

will be the subject of HOUSE & HOME'S ANNUAL MERCHANDISING DIRECTORY APRIL 1959



Easier Ways to better **Fireplaces**



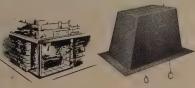
Majestic CIRCULATOR FIREPLACE with

- Proportioned to quard against smoking
- Circulates heat that other fireplaces waste

exterior! Includes damper, downdraft shelf, smoke dome, firebox and heat-boosting "Radiant Blades". Fits inside masonry. Heat is circulated through rooms by optionally placed Circulator grilles. Majestic Circulator fans convert to forced air circulation.

Unit has welded-in damper frame and strong, warp-proof formed steel damper valve. Adjustable angle seals close gaps at front.

Majestic SMOKE DOME For all multi-opening fireplaces.



Pre-proportioned to save time and guesswork. Flexibility of placement in flue avoids draft-reducing bends. Solid, seam-welded construction. Unbreakable steel valve plate.

Majestic Cast Iron & Steel DAMPERS



Rugged and dependable. Available in steel or cast iron in all sizes. Can be ordered with rotary face or pokertype control.

Write for Catalog and Prices



Publications

Basics of priming coats

Eagle-Picher researchers have prepared an illustrated 16-page report, "A Paint Job Is as Good as Its Primer," to show how various paint failures can be avoided by using adequate primer coats. Eagle-Picher Co, Cincinnati.

For copy, check No. 277 on coupon, p 236

Elastic plastic flashing

Advantages and specifications of Saraloy 400, a new elastic thermoplastic sheet flashing material is described in a Dow brochure. It can be used for fasciae, vent stacks, roof drains, pipe entries, chimneys, and other applications.

Dow Chemical Co, Midland, Mich. For copy, check No. 278 on coupon, p 236

Coating for masonry walls

Exterior masonry walls can be coated above grade for better protection and coloring. Advantages of Sonneborn's "Hydrocide Colorcoat" are explained—and ten textures offered are shown on color chips

in a new 4-page brochure.L. Sonneborn Sons, New York City. For copy, check No. 279 on coupon, p 236

Storage and remodeling books

Sunset has put together two thick 8"x11" books chockful of good ideas taken from past issues of the magazines. "Ideas for Storage in Your Home" contains 350 photos and many detailed drawings, along with ample explanatory copy. "Ideas for Remodeling Your Home" is even larger. The first sells for \$1.75, the latter for \$1.95.

Lane Publishing Co, Menlo Park, Calif. For copies, write direct to publisher.

"How to build an extra room"

That is the title of a new 24-page booklet by Johns-Manville which tells how to change attic space or a basement into pleasant living space, how to install ceiling panels, etc. Photos and drawings make it seem a snap to do. 25c.

Johns-Manville, 22 E 40 St, New York City 16.

For copy, write direct to publisher.

Facts on watertight concrete

A summary of requirements for watertight concrete and a discussion of how Pozzolith water-reducing agent increases concrete's resistance to water are reported in a 6-page brochure by Master Builders. There is also technical information on grouting, concrete work below grade, and non-shrink metallic aggregate mortar.

Master Builders Co, Cleveland. For copy, check No. 280 on coupon, p 236

Acoustics criteria listed

The 1959 edition of "Sound Absorption Coefficients of Architectural Acoustical Materials" has been published by Acoustical Materials Assn. It lists the materials by type and trade name and gives the size, weight, thickness, mounting requirements, flame resistance, and light reflection qualities of each.

Acoustical Materials Assn, New York

For copy, check No. 281 on coupon, p 236

continued on p 236



BUILT-IN UTILITY FOR KEEPING HOMES DUST FREE!

no bag or filter to choke off vacuum power no machine

no cord to tug easily installed vents dust-laden in new blue air

to lug,

outside

Every year more and more builders feature built-in Vacu-Flo cleaning systems to attract discriminating buyers. Vacu-Flo collects dirt in receptacle attached to power unit located in basement, garage or utility room . . . and vents germladen exhaust outside as you now vent cooking odors, dryer vapors, sewer gases and chimney fumes. Vacu-Flo makes dry and wet cleaning easier . . including garage, car, basement, work shop and patio.

Vacu-Flo permanent zinc-coated steel tubing and fittings are designed for easy air-tight slip-fit installation. For complete information about Vacu-Flo, the world's most powerful, convenient, economical and healthful home cleaning utility, mail this coupon today. H-P PRODUCTS, INC., Louisville, Ohio.

or existing

homes

Ask about WETVAC accessory for picking up spilled liquids, water and suds from floors and rugs, plumbing leaks, and for clearing toilets and drains.

Dep't.HH, Louis	/ISION, H-P Products, Inc. sville, Ohio I complete details on Vacu-Flo. w how to attract buyers by pro-
	es prepared for Vacu-Flo.
Firm	
Street	
City	ZoneState

See our N.A.H.B. exhibit, Booth 472

N-652-HP

Publications

Symbol of Quality PRECISION Visit the PRECISION BOOTH 514-515, NAHB

America's Finest Attic Stairway—Designed and Engineered by HARMON. Use the nationally-advertised PRECISION Deluxe Folding Stairway in your homes as a sales feature. It's a symbol of quality and guaranteed dependability to home buyers everywhere. Hundreds of thousands are now in use in homes throughout the U. S. and Canada.

QUALITY FEATURES . Lifetime Roller Bearings . Insulated, Flush-type door panel • Concealed door hinges • Double hinges for rugged strength • Full width safety treads • Hydraulic Safety Checks (optional) • Actuated by Counter-weights • Highest Quality materials throughout • No attic space required . Shipped in one package.



Convention, Sherman Hotel, Chicago

PRECISION "Labor-Saver" Closet Front Assembly

- Another quality product designed by HARMON for fine homes everywhere.

 Doors 3/4" Solid Core (top and bottom). Available in White Pine, Knotty Pine, Ponderosa, Birch or Lauan Mahogany, Walnut.

 Aluminum Track & Nylon Bearings on all doors for perfect alignment and operation.
- Completely assembled and packed 1 to a carton.
- Can be installed in 20 minutes by one person with hammer and screwdriver.

 2 standard sizes: $491/2^n \times 911/2^n$. Available in special sizes.

Manufacturers of America's most



Please send me FREE color brochure and complete information on:

Precision Stai	irway I	.in
----------------	---------	-----

Precision "Labor-Saver"
Closet Front Assembly

NAME	

ADDRESS

ZONE____ ___ STATE_

Rust rates, city by city

Comparative rates at which rust corrodes standard uncoated steel have been published by Rust-Oleum Corp covering all 523 US cities with 10,000 or more population. The material is available either in list or national map form.

Rust-Oleum Corp, Evanston, Ill.

For copy, check No. 282 on coupon below.

Slide film on plywood

A 20-minute full-color slide film telling how plywood is made and showing some specialty grades has been prepared for builder, architect, lumber dealer, and other group showings by Simpson. Showings made on request for a viewing date.

Simpson Logging Co, Shelton, Wash. For showing, write direct to manufacturer

Want more information?

The numbers below are keyed to the items described on the New Products and Publications pages. Check the ones that interest you and mail the coupon to:

House & Home

I wish to enter a subscription to House & Home for

☐ Renewal

Room 1021A, 9 Rockefeller Plaza, New York 20, N.Y.

N1	Dura	ducto												
		ducts			00	102	120	137	154	171	188	205	222	239
1	18	35	52	69	86 87	103	121	138	155	172	189	206	223	240
2	19	36	53 54	70 71	88	105	122	139	156	173	190	207	224	241
3	20	37	55 55	72	89	106	123	140	157	174	191	208	225	242
4	21	38	56	73	90	107	124	141	158	175	192	209	226	243
5 6	22	39 40	57	74	91	108	125	142	159	176	193	210	227	244
7	24	41	58	75	92	109	126	143	160	177	194	211	228	245
8	25	42	59	76	93	110	127	144	161	178	195	212	229	246
9	26	43	60	77	94	111	128	145	162	179	196	213	230	247
10	27	44	61	78	95	112	129	146	163	180	197	214	231	248
11	28	45	62	79	96	113	130	147	164	181	198	215	232	249
12	29	46	63	80	97	114	131	148	165	182	199	216	233	250
13	30	47	64	81	98	115	132	149	166	183	200	217	234	251
14	31	48	65	82	/ 99	116	133	150	167	184	201	218	235	252
15	32	49	66	83	100	117	134	151	168	185	202	219	236	253
16	33	50	67	84	101	118	135	152	169	186	203	220	237	254
17	34	51	. 68	85	102	119	136	153	170	187	204	221	238	
Pub	licat	ions												
255	257	259	261	263	265	267	269	271	273	275	277	279	281	283
256	258	260	262	264	266	268	270	272	274	276	278	280	282	284
Slid	ing	Glass	Door	' S					•					
D1	D2	D3	D4	D5	D6	D7	D8	D9 '	D10	D11	D12	D13	D14	D15
Res	earcl	h Hou	se Pr	oduct	s									
R1	R7	R13	R19	R25	R31 ·	R37	R43	R49	R55	R61	R67	R73	R79	R85
R2	R8	R14	R20	R26 ·	R32	R38	R44	R50	R56	R62	R68	R74	R80	R86
R3	R9	R15	R21	R27	R33	R39	R45	R51	R57	R63	R69	R75	R81	. R87
R4	R10	R16	'R22	R28	R34	R40	R46	R52	R58	R64	R70	R76	R82	R88
R5	R11	R17	R23	R29	R35 °	R41	R47	- R53	R59	R65	R71	R77	R83	R89
R6	R12	R18	R24_	R30	R36	R42	R48	R54	R60	R66	R72	R78	R84	R90
NAN	/E													
000	IIDA"	TION					TIT	LE						
000	OFA	11014												
FIR	М													
STF	REET.													
CIT	Y			,			s	TATE_						
Ho	150 de	FANT: Home	's serv	ricing (of this	соира	оп ехр	ires Ap	or, 195	19. In (address	ing dir	ect inq	uiries,
plea	ise m	ention	Hous	e & H	ome	and th	e issue	in wh	ich yo	u saw	the pro	duct o	r publi	cation.

2 years, \$8 🗌

1 year, \$6 🗌

Signature

US and possessions and Canada only



KANS.

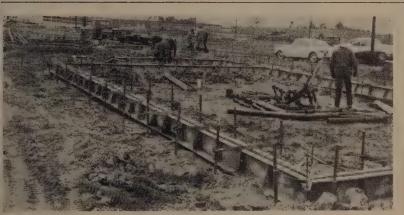
OKLA.

MO.

ARK.

Company

Street Address



✓ Choice of 3 handsome exterior designs

FIND OUT HOW WE CAN HELP YOU WITH A COMPLETE FINANCING PROGRAM

ADSWORTH HOMES, INC.
2949 Chrysler Road

Kansas City 15, Kansas

✓ 26 x 36 feet of efficient design

10-Man Hours to Set-Up Foundation with SYMONS LO-WALL FORMS

At its new housing development, Contractors and Builders, Inc. uses Symons Lo-Wall Forms and three specialized crews to keep job moving. One three-man crew erects, two or three men pour and two men strip. It takes 10 man-hours for form erection, 11/2 man-hours for pouring, and only three man-hours to strip and move the forms. Foundations vary from 33 x 49 feet to 29 x 57 feet.





2949 Chrysler Road,

new 1959 Economy Horizon.

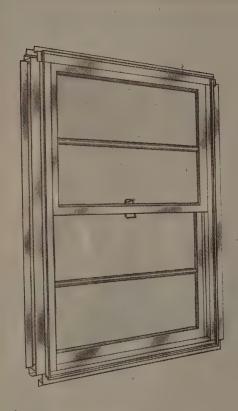
Please send complete information on the

Kansas City 15, Kansas

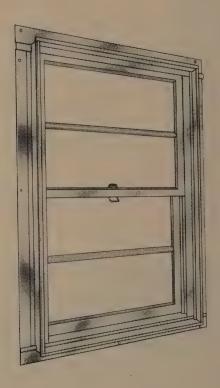
Zone

LOOK...



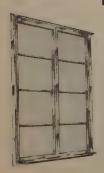


New Ceco "Series 60" Double-Hung (with channel frame)

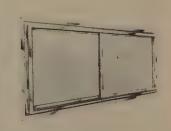


New Ceco "Series 70" Double-Hung (with fin-trim frame)

HERE ARE JUST 5 OF THE MANY WINDOW TREATMENTS OFFERED BY CECO



Aluminum and Steel
Residence Casements
For certain design effects, consider Ceco Aluminum Residence
Casements—Series 825 with integral fin-trim for frame and veneer construction or Series 800 (Z-bar style) for masonry. If steel windows are indicated, use Ceco Steel Residence Casements (Z-bar style) for either masonry or frame construction.

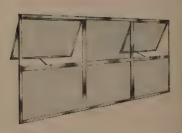


Aluminum

Horizontally Sliding Windows
You achieve the wide-wide look with
Ceco Aluminum Sliding Windows,
Series 700. Easy to install with integral fin-trim. Good appearance, yet
economical. Here is true versatility.
Many interesting multioned arrangements and panel systems can be
designed.



Aluminum
Awning Windows
Ceco Aluminum Awning Windows are handsome and then some. Engineered and made to meet high standards. Truly weathertight. All sides of the vents lock firmly against the weatherstrip frames. Full controlled ventilation.



Aluminum and Steel
Window-Walls
Whatever your design dictates—
aluminum or steel—Ceco WindowWalls are available either way, Ideal
for ranch type homes and other residential designs where large light
areas and architectural patterns are
desired. Window-Walls are available
with sliding inserts, too. Ceco Fixed
Windows are offered for use with
Window-Walls.

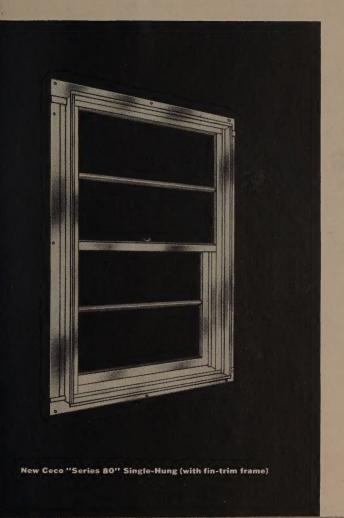
SEE THE WINDOW HITS OF THE NAHB SHOW

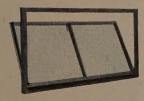
CECO'S New Craft-Made—Custom Quality— Expertly Engineered Residential Windows Meet Customer Demands

P.S. PRICED SENSIBLY

It takes a company with vast engineering and research resources to offer truly custom quality windows at production line manufacturing costs. And that's what Ceco gives you in its 3 great aluminum windows . . . Series 60 Double-Hung with channel frame; Series 70 Double-Hung with fin-trim frame and Series 80 Single-Hung with fin-trim frame. Here you get whisper silent performance combined with precision weathertightness and smooth fingertip operation. Reason: Sash are countered with even-tensioned spiral balances and are cushioned with pre-tested silicone-treated wood pile weatherstripping. Small wonder home owners everywhere quickly see the custom quality these windows really provide. You as a builder will appreciate the easy installation. Series 70 and 80 have the labor saving fin and trim integrally extruded into the frame. In Series 60 with channel frame, fast and positive anchorage is assured. No matter what your need, see Ceco, manufacturers of the most complete line of steel and aluminum windows in the USA...better engineered, better made and yes-P.S.-priced sensibly. Ceco Steel Products Corporation—offices, warehouses and fabricating plants in principal cities—general offices: 5601 W. 26th St., Chicago 50, Ill.

IN CONSTRUCTION PRODUCTS CECO ENGINEERING MAKES THE BIG DIFFERENCE
Windows, Screens, Doors / Curtainwalls / Roofing Products / Cecoframe Buildings / Steel Joists
Steelforms / Rebars / Metal Lath



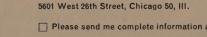


Steel Ceconomy Basement Windows

Here are truly engineered basement windows that provide double-contact weathering around the perimeter, Combination fin and masonry guide assures anchorage. Combination screen and storm window units are available for Ceconomy Win-

See us at
Booths No.
87 and 100
at the
NAHB Show

CECO



CECO STEEL PRODUCTS CORPORATION

Please send me complete information about Series 60, 70 and 80 Aluminum Windows.

Please send me complete information about______Windows.

ame_____

Position_____

Address

City_____Zone____State_____

нан

ADVERTISERS INDEX:

This advertisers index published by HOUSE & HOME is an editorial service to its readers. HOUSE & HOME does not assume responsibility to advertisers for errors or omissions in preparation of these listings.

		The Parket	
Page:		Page: 186, 187	Keystone Steel & Wire Company
193	Allied Chemical & Dye Corp. (The Barrett Div.)	192	Kitcheneering Co. of America
80 81	Amchem Products, Inc. American Gas Association	3	Kwikset Sales & Service Co.
44	American Motor Corp. (Kelvinator Div.)		
88 1B	American Rock Wool Corp. American-Saint Gobain Corp.	89, 100	Libbey-Owens-Ford Glass Company Long-Bell Division (International Paper Co.)
48	American-Standard Corn (Air Conditioning Div.)	20 15	Louisville Cement Co.
90	American-Standard Corp. (Youngstown Kitchens Div.)		
14	American Telephone & Telegraph Co.	91, 235	Majestic Co., Inc., The
98	Amtico Flooring	21	Magic Chef
82, 83	Andersen Corp.	38, 39, 94	Masonite Corp. of America
226	Barclay Mfg. Co. Inc.	73	McCall Corp.
193	Barrett Division, The (Allied Chemical & Dye	227 56 B-C	McQuay, Inc. Minnesota & Ontario Paper Co. (Insulite Division)
185	Corp.) Bell & Gossett Co.		
203	Besser Co.	30	National Concrete Masonry Assn.
17 237	Bestwall Gypsum Co. Black White Limestone Co.	Cover IV	National Homes Corp.
7	Bostitch, Inc.	207 Cover I, 1, 1A	National Lock Co. Nutone, Inc.
13	Broan Manufacturing Co., Inc. Broyhill Premier	001012, 1, 112	
96	Broylin Tremier	71	Onan & Sons, Inc., D. W.
51	California Redwood Assn.	62	Orangeburg Manufacturing Co., Inc.
Cover III	Caloric Appliance Corp.	222, 223	Overhead Door Corp. Owens Corning Fiberglas Corp.
23-26	Capitol Products Corp. CARADCO, Inc.	,	
174, 174A	Carrier Corp.	192	Peterson Window Corp.
238, 239	Carrollton Manufacturing Co. Ceco Steel Products Corp.	182, 183	Pittsburgh Plate Glass Co.
236, 237	Celanese Corp.	233 236	Powers Regulator Co., The Precision Parts Corp.
179 208	Certain-Teed Products Corp. Chambers Built-Ins., Inc.	- Total	
174B, 175	Colonial Products Co.	234	Redibrik Industries, Inc.
69, 70	Commercial Controls Corp. (Electromode Div.) Consolidated General Products, Inc.	46, 47	Reynolds Metals Co. Richmond Plumbing Fixture Division (Rheem Mfg.
77	Copper & Brass Research Corp.	102	(Co.)
93, 172 58, 59	Crawford Door Co. Curtis Companies Service Bureau	229	Rilco Laminated Products, Inc. Rolscreen Co.
30, 39	Guitis Companies Service Bureau	209, 211	Romar Filter Corp.
. 50	De Vac, Inc.	27 29	Roper Corp., George D. R. O. W. Sales Co.
86	Delco Appliance Division (General Motors Corp.)	29	R. O. W. Saics Co.
31 213	Dixie Products, Inc. Ducfless Hood Co., Inc.	76	Samuel Stamping & Enameling Co.
199	Dur-O-Wal	97	Sargent & Co.
42	Dwyer Products Corp.	197	Schlage Lock Co. Schlegel Mfg. Co.
	THE THE STATE OF T	213 92	Scholz Homes, Inc.
12 208	Edison Electric Institute Efron Manufacturing Co., Theodore	228	Shake-A-Ply Corp.
33	Electromode Div. (Commercial Controls Corp.)	32	Shakertown Corp. Soss Manufacturing Co.
		11	Spotnails, Inc. Square D Company
10	Farley & Loetscher Manufacturing Co. Fasco Industries, Inc.	237	Symons Clamp & Mfg. Co.
72 180, 181	Fedders-Quigan Corp.		
231	Fleet of America, Inc. Ford Motor Company	232	Tennessee Stove Works
18, 19	Formica Corp., The	43 213	Textron Metals Co. Thermo-Rite Manufacturing Co., The
		178	Trade-Wind Motorfans, Inc.
94	General Bronze Corp.		
53-56, 98, 170,	General Electric Co.	99	Universal-Rundle Corp.
176, 177 188-191	General Electric Co. (Hotpoint Div.)		
70A	General Electric Co. (Wiring Device Dept.) General Motors Corp. (Delco Appliance Div.)	178	
86	General Motors Corp. (Detto Appliance Div.)	232	
235	H-P Products, Inc.	- 91	
16	Hall Mack Co.	237	Wadsworth Homes
8, 9	Harris Manufacturing Company Hastings Aluminum Prod.	225	Wallace Co., William
188-191	Hotpoint Co. (Division of General Electric Co.)	173 184	Welbilt Corp.
234	House & Home	66, 67	Westinghouse Electric Corp.
BELL SA		34, 3 ⁵ 5	White-Rodgers Co.
195 56 B-C	Inland Homes Corp. Insulite Division (Minnesota & Ontario Paper Co.)	224	
20	International Paper Co. (Long-Bell Division)		Supplied to the late of the la
		230	wrt. 4 (D' .! Assessings Standard
28, 95	Johns-Manville Corp.	90	Corn.)

HOUSE & HOME

205 Zegers, Inc.

44 36 Kelvinator Division (American Motor Corp.) Kentile, Inc.



Calloric GAS APPLIANCES

MEAN EASY LIVING...MAKE HOMES EASY TO SELL!



ALORIC GAS DISPOSER with Jetream action burns everything but etal and glass. Lid locks automatally when dial is on. No smoke odor escapes.

Designed for "home automation"... Caloric built-in gas ranges and disposers are now more automatic than ever. They make cooking and garbage disposal almost as easy as turning a dial! Install Caloric in homes you build or in the kitchens you remodel. Point out these important features to customers:

Thermo-Set Top Burners keep food at the exact temperature set. Make every pan "automatic".

Meat Thermometer cooks meat till it's "just right"... then turns oven off, automatically.

Clock-Controlled Oven turns on by itself, cooks complete meals, turns off by itself.

ROTO-ROASTER lets the family enjoy juicy, flavorful barbequed meats all year 'round.

When you install Caloric you give home buyers the automatic features they're looking for, plus built-in kitchen convenience. Choose from 7 handsome finishes. And remind your customers that Caloric is "America's easiest range to keep clean." For further information on Caloric built-in gas ranges and disposers, write:

CALORIC APPLIANCE CORPORATION DEPARTMENT HH, TOPTON, PENNA.

CALORIC • THE BUILT-IN SPECIFIED BY LEADING HOME BUILDERS FOR AMERICA'S BEST HOMES SELECTED FOR SHOWING IN THE U. S. PAVILION AT THE BRUSSELS' INTERNATIONAL EXPOSITION

National Homes invites you to see

the house nobody could build 'til now...

The aluminum houses that outsold all others 9 to 1 in the first public offering!

See it at the National
Association of
Home Builders Convention,
January 18-22, corner of
Michigan Avenue and
Eighth Street—just south
of the Conrad Hilton
Hotel. A convention
registration badge is your
admission ticket.

Record-breaking crowds turned out in Lafayette, Indiana, for the first showing of National Homes Viking Line. A total of 90 sales were made in 3 days in the 126-lot subdivision. 81 of the buyers selected homes with revolutionary bake-finished lifetime aluminum exteriors!

Come and see for yourself why National Homes Viking Line is the most exciting sales opportunity ever to be offered to the aggressive builder-dealer.

For full information on National Homes complete financing—including land procurement, site development and interim as well as final financing—be sure to visit National Homes Booth, Spaces 62 and 63.



Bake-finished lifetime aluminum roof and exterior walls . . . maintenance-free!

National Homes Corporation, Lafayette, Indiana Plants at Lafayette, Indiana; Horseheads, New York; Tyler, Texas The World's Largest Manufacturer of Quality Homes

